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MENTAL HEALTH AND HOMICIDE INVESTIGATION

ANNUAL MEETING — OCTOBER 1 and 2

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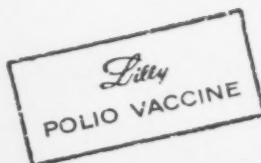
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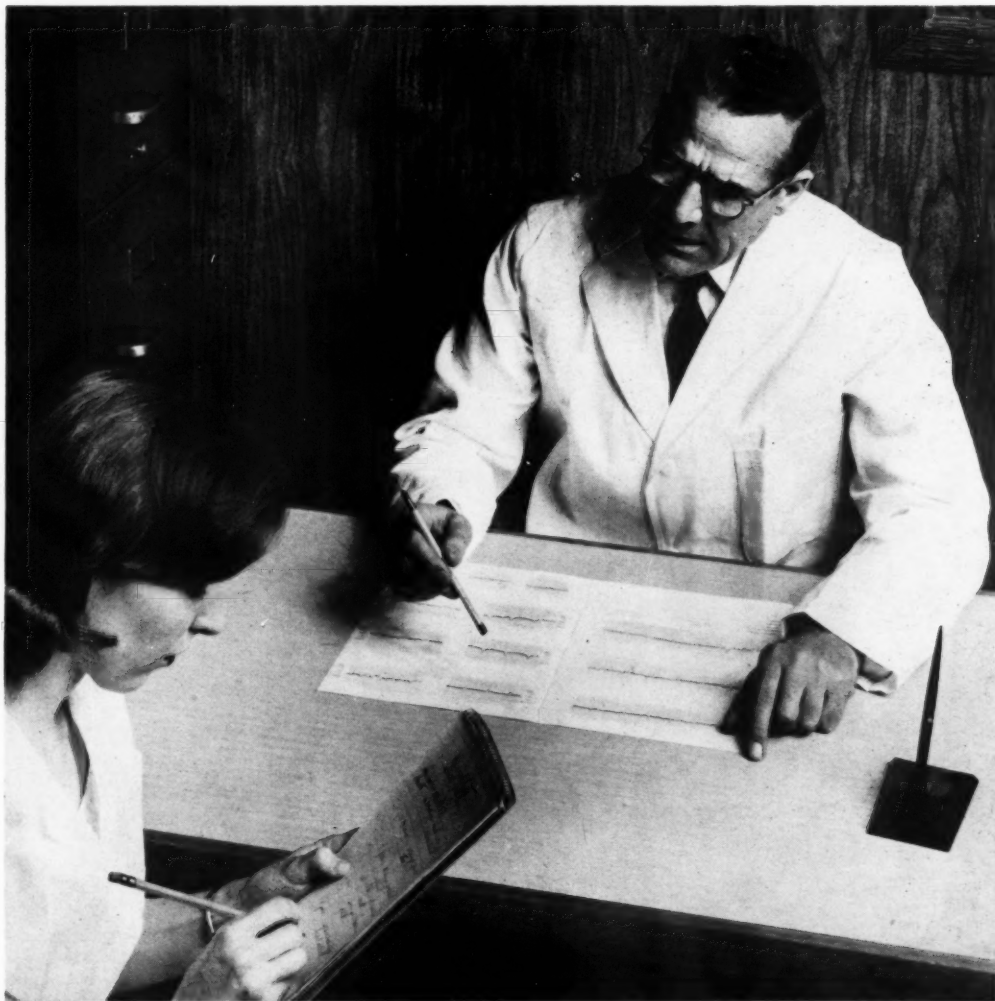
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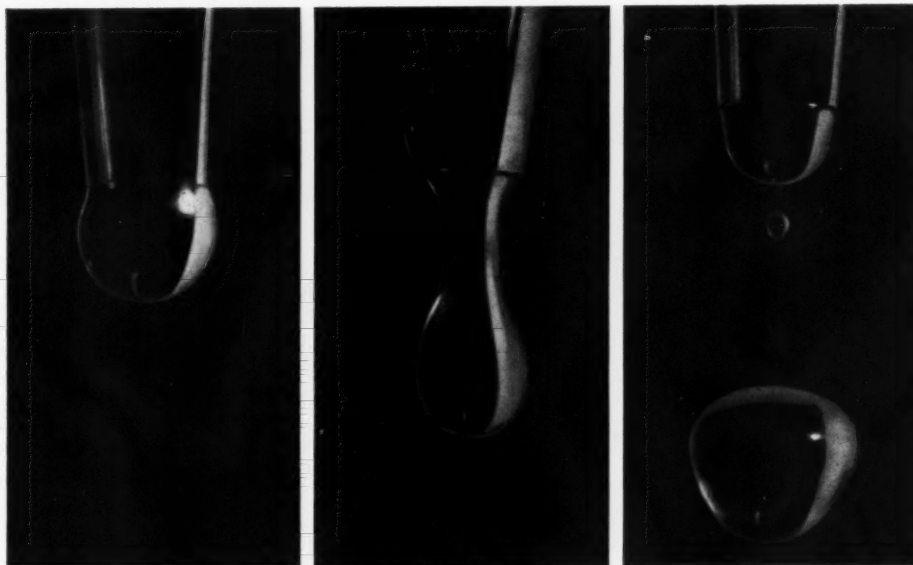
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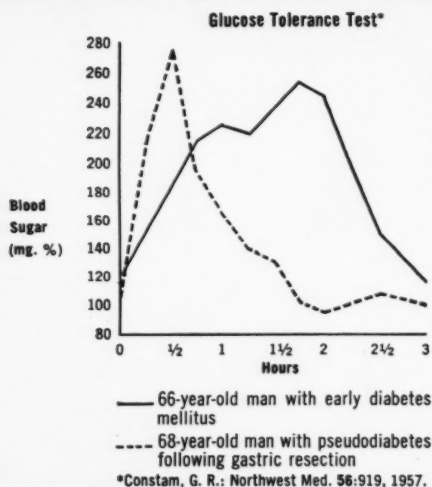
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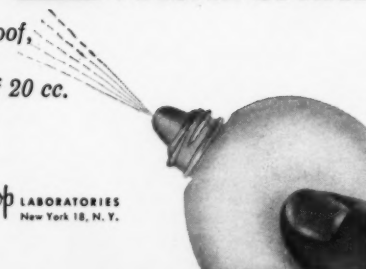
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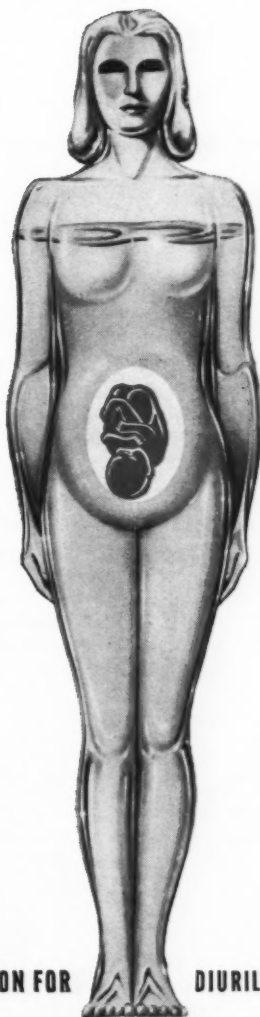
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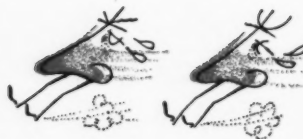


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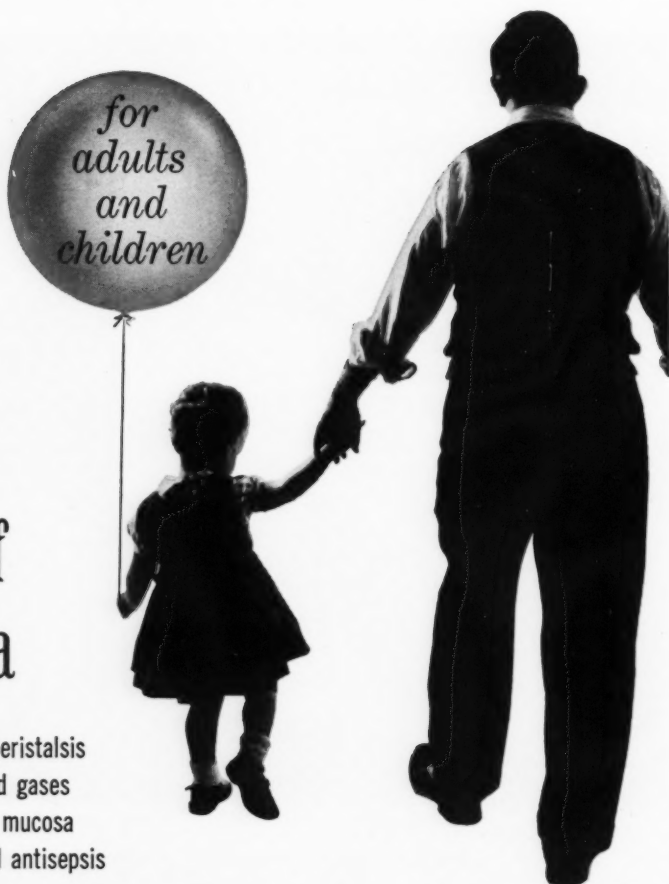
1. Russek, H. I.: Postgrad. Med. 19:562 (June) 1956.

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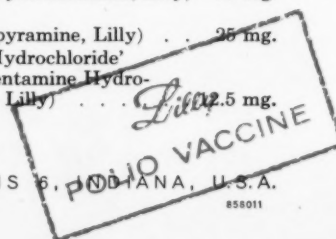
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MENTAL HEALTH IN RELATION TO HOMICIDE INVESTIGATION

M. A. TARUMIANZ, M.D.*

Introduction. The will to exist is fundamental in the life of an organism. In the most highly developed organism known to science—the human being—the will to live is essential to the preservation of the individual. The destruction of an individual is a threat to the well-being of society. The words of the English poet, John Donne, are as applicable today as they were when he wrote them in the sixteenth century. "No man is an island, entire of itself; every man is a piece of the continent, a part of the main; . . . any man's death diminishes me, because I am involved in mankind; and therefore never send to know for whom the bell tolls; it tolls for thee."

From the earliest period of recorded history the taking of human life has been regarded as a crime. "Thou shalt not kill" is the Sixth Commandment. The ancient Hebrews were nomads who suffered great loss of life from natural causes. Death diminished the tribal strength and if an individual was slain, his tribe must be compensated for his loss. The slayer was the logical source of recompense. Among primitive peoples not only must the surviving kinsmen receive compensation, but the spirit of the dead member also must have atonement for being deprived of life.¹ If payment was not made, relatives of the slain could kill the slayer. Homicide investigation has its roots in the tribal custom of primitive peoples. For an excellent discussion of the historical development of laws and procedures regarding adjudication

of homicide cases I commend to you Judge John Biggs' book, "The Guilty Mind."

Societal groups, beginning with primitive tribes and advancing to modern states and nations, have rationalized the taking of human life under the defense of protecting the total group from destruction. Thus has the execution of felons been justified, and from this concept has come the idea of collective protection symbolized by war. Fortunately, people are beginning to question the effectiveness of the taking of one life for another. Studies of human behavior have shown that the law of retaliation—referred to in legal language as "*lex talionis*", the idea of "an eye for an eye and a tooth for a tooth," has not been effective in deterring homicide.

Psychiatry In Regard to Execution. In March of this year the State of Delaware became the seventh state in the United States to abandon capital punishment.² In the hearings before the Delaware General Assembly on Senate Bill #299, a review of the legal executions in the State from 1902 through 1946, when the last execution was performed, revealed that two of the persons executed may have had less than normal mentality. The death sentence of a 30 year old white male, convicted of murder in 1910, was commuted to life imprisonment. He later was declared mentally ill and in 1914 was transferred to the Delaware State Hospital.

In speaking before the Committee on Judiciary of the New Jersey Assembly at

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a hearing on June 5, 1958, regarding two bills of the New Jersey Assembly to substitute life imprisonment for capital punishment, Herbert L. Cobin, the President of the Prisoners Aid Society of Delaware and Former Chief Deputy Attorney General of Delaware, commented that 25 persons have been executed in Delaware since 1902; 19 for murder, six for rape. Fourteen of the executed were between the ages of 20-29 years, nine were between 30-39 years, one man was 44 years old and one female 52 years old.

All of these persons were in the unskilled laboring class and had limited education. Some could not read or write. Some were able to write only their names. Seven were Caucasians, including one woman; twelve were Negroes. Only six were born in Delaware. Three maintained their innocence throughout the trials, two protesting the accusation of guilt from the scaffold. In three cases the Court, in passing sentence, ignored a jury's recommendation for mercy. Of the 25 persons executed during the period for which statistics were readily available, the conviction for which they were executed was the first conviction for more than one half.³

From 1904 to 1954 nine other persons were received at the New Castle County Correctional Institution under death sentence. Of this group six were males convicted of murder. The mentally ill convicted prisoner referred to above was in this latter group. The first of this group, a colored 29 year old man, was convicted in 1904 and pardoned in 1905. In 1911 the death sentences of two 15 year old Negro boys were commuted to life imprisonment. One died in prison the same year, the other was pardoned in 1924. One 31 year old Negro male was sentenced to death in 1936. His death sentence was commuted to life imprisonment in 1937. In 1945 his sentence was again changed to 20 years. In 1946 he was paroled. A 21 year old Negro male, sentenced in 1950, was re-tried and sentenced to life imprisonment in 1952. The sentence of a 26 year old Negro male was commuted to life in 1955.⁴

It was Mr. Cobin's opinion, based on his talks with members of the General As-

sembly, both in the Senate and the House of Representatives, that "the foremost consideration in the passage of the Bill was that they were convinced by the facts shown that the death penalty does not act as a deterrent to crime or is of such slight deterrence that its use is outweighed by other considerations." Some of the legislators were convinced "that the public should not be a party to the taking of a human life." Other legislators considered important "the obvious fact that capital punishment was applied mostly to the poor, the ignorant, the unfortunate without resources and is applied unequally." Many of the legislators "were more impressed with the facts showing that innocent persons have been executed." Other considerations which were involved in the final decision of the legislators to substitute life imprisonment for capital punishment were: (1) the fact that capital punishment "is recognized as being solely a retributive and punitive action in strong contradiction to the present day concept of rehabilitation and treatment of the offender," (2) persons committing capital offenses are usually "those suffering from mental disturbances or those impulsive in nature," (3) that these defendants are not a "criminal class," (4) that persons who have committed capital offenses often "make the best prisoners and the best parolees," (5) that an entire penal policy should not be based on the relatively few who can be classified as "depraved killers," (6) that there is no diminution of "protection for the police where capital punishment has been abolished," (7) that more convictions are obtained with fewer delays in places where capital punishment has been abolished, (8) that trials are less sensational if the life of the defendant is not at stake, (9) that juries, lawyers, and the court are not adversely affected if the penalty of death is eliminated from the trial, (10) that it is a questionable procedure to indict for a capital offense only to force a plea for a lesser offense, (11) that society is amply protected by the custody of the offender, (12) that retention of the death penalty "delays a more effective attack upon crime, crime prevention and the correction of the offender."⁵

The Mind of a Murderer. From the foregoing material arise such questions as why would 15 year old boys commit murder? What causes men to kill? Are murderers "hardened criminals?" Since most people in the world do not kill others, homicide must be recognized as abnormal behavior. Criminals are persons who are unable to subjugate their personal desires for the good of society. They behave in a primitive or childlike manner, giving vent to intense emotion without inhibition or seeking immediate gains without regard to the effect of their actions on others. Such uninhibited action may proceed to the extent of killing any one who represents a deterrent to the accomplishment of the immediate end.

Murder may symbolize suicide. The urge to destroy oneself is turned toward another instead of inward. The suicide motive may be channeled into an aggressive act against another person. The newspapers frequently record instances of homicide in which the murderer, after killing his victim, attempts to commit suicide, and only through a stroke of fate such as the jamming of the gun is he saved to "answer" for his crime. In the Delaware State Hospital one of the mentally ill murder defendants is a woman who, in attempting to commit suicide, held her baby in her arms while she inhaled gas from the kitchen range. The baby was asphyxiated, but she was rescued.

The depressive psychotic person frequently does violence against some one who is almost a part of himself. After the homicide, as in the case of a mother killing her child, the wish for suicide may be lost, for in a sense the psychotic has already killed himself in destroying someone whom he may have seen almost as an *alter ego*.⁶

Examination of homicide cases has indicated a large proportion involving family members. In a study of 36 consecutive cases of homicide involving family members, including "common law" partners, whom Guttmacher examined in the Medical Office of the Supreme Bench of Baltimore,⁷ he found that five of the 36 cases had previously been admitted to psychiatric hospitals. Ten of the cases made genuine but unsuccessful suicide attempts immediately

after the slaying but did not attempt suicide later. Two who attempted suicide later, and succeeded, had not tried to commit suicide immediately after the crime. Desertion by the spouse for another appeared to be the most prominent motivating factor. Eight were adjudged not guilty by reason of insanity; two died before trial; one was held not guilty because of self defense.⁸

Homicide may be the result of brain disease. Altered brain function due to organic and structural changes in the brain is accompanied by altered psychological outlook, with observable deviations in outlook and behavior. A tendency toward homicidal activity is among the more serious behavior disturbances seen in epileptic patients. Impatience, anger or aggression may result from erratic irritability in an epileptic. This has been observed by many psychiatrists studying cases of homicide by epileptics.

In the case of schizophrenia, a frank mental illness, murder may serve as a definite defense against the ego disintegration characteristic of the disease.

Among the 24 mentally ill homicide patients in the present population at the Delaware State Hospital 14 (11 males, 3 females) have been given the diagnosis of "Schizophrenia, Paranoid Type." One of these is a white woman admitted in 1909 at age 34 years. Another, a white male, was admitted at age 37. The admission age range was 22-63 years, with only two over 45 years of age. Eleven of the group were between 22 and 37 years old when admitted. The median admission age is 36.4 years.

The other ten homicide patients currently at our hospital have been given the following diagnoses.

- (1) Acute Brain Syndrome associated with the following types:
 - (a) Alcohol Intoxication (a 46-year-old white male admitted in 1948)
- (2) Chronic Brain Syndrome associated with the following types:

- (a) Alcohol Intoxication (a 35-year-old colored male admitted in 1949)
 - (b) Convulsive Disorder with Psychosis (a 23-year-old white female admitted in 1950)
 - (c) Epidemic Encephalitis with Psychosis (a 12-year-old white male admitted in 1932)
 - (d) Meningoencephalitic Syphilis (a 37-year-old colored male admitted in 1956)
3. Mental Deficiency, moderate, with Psychotic Reaction (a 29-year-old colored male admitted in 1950).
 4. Personality Pattern Disturbance, Schizoid Personality (a 42-year-old white male admitted in 1954).
 5. Psychoneurotic Reaction, Depressive Reaction (a 32-year-old white male admitted in 1954).
 6. Transient Situational Personality Disturbance, Adult Situational Reaction (a 48-year-old white male admitted in 1942).

Homicide may be a concomitant of other crimes and may result from extreme fear; for example, the rapist, who murders his victim in an effort to escape detection. Other abnormal and chaotic sexual activity may eventually end in murder. In the literature is described the case of a youth who suddenly stabbed to death a girl sitting in front of him in a movie. An abnormal sex drive impelled him to torture women to death.⁹

William Heirens, the 17-year-old University of Chicago student who, in 1947, killed three persons, explained his murders as his efforts to escape detection on being discovered burglarizing. Investigation revealed that he had committed more than 500 robberies, his motive being to collect women's undergarments. This type of sexual aberration is known as fetishism. According to the youth's history, he began at the age of 9 to steal women's underclothes. At first he could produce sexual orgasm by wearing these garments. Later he received sexual stimulation from stealing the gar-

ments. After his arrest trunks of women's sheer underwear were found in his possession.¹⁰

James Colbert Smith, who wantonly shot and killed a taxicab driver in Philadelphia, Pennsylvania, on January 15, 1948, presented a combination of symptoms of mental illness. He was a homosexual, an alcoholic, and a habitual user of narcotic drugs.¹¹ On his discharge from the Naval Hospital in Philadelphia, to which he had been taken at his own request on December 27, 1945, the Chief of the Hospital Psychiatric Service had suggested the possibility of Epilepsy, Petit Mal or Psychomotor Equivalent.¹²

Mental Illness as a Defense in Homicide. As has already been indicated, homicide is aberrant behavior which frequently occurs as impulsive or explosive action. The psychiatrist recognizes that the more brutal and sadistic the murder, the greater may be the evidence of mental illness. The person who cannot control his impulses by the use of intellect, and therefore gives way to elemental instinctive reactions resulting in the destruction of human life, certainly is a psychiatric problem. He may not be a frank psychotic, however, or "insane"—to use the term still commonly used in legal practice. According to the legal definition of mental illness in terms of responsibility for one's criminal acts, a slayer acting on the basis of the wildest hallucinations may be considered sane.

As early as the reign of Edward I (1272-1307) insanity was recognized as a cause of crime. About the middle of the Fourteenth Century under the monarchy of Edward III, the theory of "absolute madness" was accepted as a complete defense in criminal cases. Proceeding from the theory of "absolute madness," the mind of the mentally ill person was compared to that of a wild beast. From this definition came the test of "raving madness". If a person's mind was like that of a wild beast, he could not know what he was doing nor could he know right from wrong.¹³ This idea of knowing right from wrong seems based on the assumption that one who is not mentally ill automatically knows right

from wrong. Sociology has contributed the knowledge that behavior acceptable in one culture is taboo in another. Also, the motive behind a particular act may determine, at least to some extent, whether an act is right or wrong.

One definition of murder is "killing with malice prepense," or as it is more commonly expressed, "with malice aforethought."¹⁴ This implies "a deliberate intention to commit the act." This concept underlies the idea of *mens rea*, a term meaning "guilty intent." The expression *mens rea* is derived from a Latin maxim which has been translated as: "An act does not make a man guilty unless his intentions be bad."¹⁵

The test of criminal responsibility on the basis of a knowledge of good or evil (later, right or wrong) seems to have been well established by the Sixteenth Century in England. There were several outstanding cases in the Nineteenth Century in the British Courts in which mental illness in the defendant was presented as the defense in homicide cases; for example, the Bellingham Case. In 1812 John Bellingham shot and killed Spencer Perceval, first lord of the treasury and chancellor of the exchequer. Although it was quite clear that Bellingham was mentally ill, the jury found him guilty, and he was promptly executed. The charge to the jury was to decide whether, at the time the act was committed, Bellingham "possessed a sufficient degree of understanding to distinguish good from evil, right from wrong, and whether murder was a crime not only against the law of God, but against the law of his country."¹⁶

The application of *mens rea* or the "guilty mind" theory to the accused became crystallized into a formula which has continued to be applied in homicide trials. For more than 100 years the McNaghten formula has operated in the courts of every state in this nation and in the courts of foreign countries. In 1843 Daniel McNaghten, a Scotsman, shot Edmund Drummond, the principal secretary of British Prime Minister Sir Robert Peel. McNaghten was charged with first-degree murder. McNaghten had been subject to delusions of per-

secution. He was hallucinated. Nine medical witnesses swore in open court that the defendant was clearly insane. A verdict of "not guilty, on the ground of insanity" was rendered.

The test of criminal responsibility as enunciated in the McNaghten trial has been the basis for determining the responsibility of the defendant in criminal acts. This formula has remained the sole test of responsibility in 29 states, while 14 or more states have added to it the concept of irresistible impulse or "temporary insanity."¹⁷

The history of the United States Courts contains numerous cases in which the application of the McNaghten Rules has resulted in extended and expensive court procedures. The trials of Louis Wolfe is a case in point. On December 30, 1943, in Brooklyn, New York, Wolfe, believing his wife unfaithful to him, killed her by beating her on the head with a shoe containing a heavy shoe-tree. He telephoned the police, who placed him under arrest. The attorney retained as his counsel had a long conference with him on the morning following the slaying. The attorney deduced from the defendant's behavior, his manner of speaking, and account of the killing that Wolfe was mentally abnormal. On the day after the conference the defendant handed to the lawyer a ninety page letter giving in detail the circumstances which led to the killing. It was the attorney's opinion, although a layman, that Wolfe was mentally ill according to any definition, legal or medical. The defendant refused permission for an application to be made for his commitment to the Kings County Hospital for observation. In withdrawing as the defendant's counsel, the attorney sent a written notice to the court of his position regarding the defendant. Eleven months later Wolfe was tried. He placed a defense that on the night of the crime he was insane. He made no claim of mental illness at the time of the trial. Although, according to reports of the case, Wolfe talked brilliantly and eloquently, he proclaimed himself the Messiah and made other statements which attested his abnormal mental condition. The New York statutes do not excuse from

criminal liability "an idiot, imbecile, lunatic, or insane person"—to use the words of the law—unless his "defect of reason" is such that he does not "know the act was wrong."¹⁸ According to the definition of criminal responsibility the defendant was found guilty of murder in the first degree.

Ten days after the verdict was given and before the prisoner was sentenced, his counsel applied to the court for an order committing Wolfe to Bellevue Hospital for examination to determine his mental status at that time. The order was granted and on December 8, 1944, nearly a year after the crime was committed, Wolfe was found to be "suffering from a mental disorder" which was diagnosed as "schizophrenia or dementia praecox of the paranoid type." He was committed to the Matteawan State Hospital after a court hearing, to be held there until such time as he would be able to return to the court for judgment on the conviction.¹⁹

Five years later the authorities at Matteawan State Hospital certified that Wolfe was able to appear in court and assist his defense. At the hearing on the motion to confirm the hospital report regarding Wolfe, the Assistant District Attorney, who was in charge of the proceedings, concluded that the prisoner's mental condition was abnormal. He, therefore, had the patient re-examined. There was sharp conflict in the opinion between the hospital psychiatrists and the psychiatrists for the court. On the basis of the opinion of the psychiatrists for the court, Wolfe was sentenced to die in the electric chair. Much litigation followed after the defendant moved to have the conviction set aside on the basis that he was mentally ill at the time of the trial six years previously. Finally the Assistant District Attorney, who still believed the prisoner mentally ill, recommended to the Governor of New York that the death sentence of Louis Wolfe be commuted to life imprisonment.²⁰ Of course Wolfe knew what he was doing when he killed his wife. Of course he knew that the act was wrong or he would not have called the police. "The defect of reason" under which Wolfe was laboring was the delusion that he was the Messiah and that it was his responsibility

to rid the world of evil. His delusion regarding his wife's unfaithfulness made him see her as part of the evil to be eliminated.

Justice Charles Doe in 1868 in New Hampshire, in dissenting from a decision of the Supreme Court of that state, wrote an opinion which in legal and psychiatric literature is now known as the New Hampshire Rule.²¹ Judge Doe's statement said in part, "the will does not join with the act, and there is no guilt, when the act is directed or performed by a defective or vitiated understanding . . . so far as a person acts under the influence of mental disease, he is not accountable . . . a product . . . of disease of the mind is not . . . a crime. . . ."²²

On July 1, 1954, Judge Bazelon of the Court of Appeals for the District of Columbia, in concurrence with Judges Edgerton and Washington, announced a decision which has become the newest advance in the efforts of courts to deal justly with the criminal who is mentally ill. Judge Bazelon stated, "The rule we now hold must be applied on the retrial of this case and in future cases is not unlike that followed by the New Hampshire Court since 1870. It is simply that an accused is not criminally responsible if his unlawful act was the product of mental disease or mental defect."²³

The Possible Contribution of the Psychiatrist to Homicide Investigation.

Psychiatry is a special branch of medicine which deals with deranged behavior and mental illness generally. The psychiatrist is equipped to make an objective scientific evaluation of the defendant's mental condition. He should be asked to give his findings on the mental condition of the patient. When he is asked to examine a defendant the court should furnish the psychiatrist an adequate history of the defendant. School records, probation reports, and any other pertinent material regarding the defendant should be made available to the examining physician. He should be granted adequate time to gather pertinent information regarding the defendant's social environment and past life, and to have a

psychological evaluation made. There should be time for such procedures as the electroencephalograph (EEG) and, if indicated, the pneumoencephalograph to determine whether there is evidence of brain damage in the defendant. The psychiatrist can best be used by the court to give evidence concerning the defendant's mental condition, including whether the prisoner is able to participate in his own defense, whether he should be treated in a mental hospital, or otherwise.

Several states have now made it possible by law for the court to have a psychiatric examination of all persons accused of murder. The New York State law regarding such cases directs that the court, upon its own motion or that of the district attorney or the defendant, may order a defendant to be examined to determine the question of his sanity instead of proceeding with the trial.²⁴ The Briggs Law of Massachusetts makes a similar provision.²⁵

The General Assembly of Delaware directed that "the Board (State Board of Trustees of the Delaware State Hospital at Farnhurst, Delaware) shall appoint a Superintendent of the State Hospital," and further directed, "The Superintendent shall be the director of the State Mental Hygiene Clinic and the State Psychiatrist and Criminologist."²⁶

When the Delaware Legislature created the Mental Hygiene Clinic in 1929 it included among the duties and powers of the Mental Hygiene Clinic the following stipulations: "The Clinic may observe, examine, study and treat the inmates of any institution supported in whole or in part by the State, or any county thereof, and may likewise observe, examine, study, and treat any person charged with any offense in, or subject to, any court within the State, when requested to do so by a judge or judges thereof."²⁶

Under these laws we have examined all persons indicted for homicide, if the Court or the Office of the Attorney General has so requested. Such defendants are examined before they are brought to trial. The State Psychiatrist in his report to the Attorney General states whether, in his opinion, the

defendant is able to stand trial and to give help to his attorney in his own defense. The New Hampshire Rule is used by the Delaware courts rather than the McNaghten Rule. It has been the custom of the courts to accept the opinion of the State Psychiatrist regarding the mental condition of a defendant.

Relatively few of the homicide defendants tested in the Mental Hygiene Clinic since its inception in 1929 have been mentally ill to the extent of being unable to stand trial. A majority of the pre-trial psychiatric examinations of homicide defendants have been of family members, including spouses and common-law relationships. Often the victim has been involved in a love affair with a spouse or paramour. Although most of the defendants have not been psychotic, with few exceptions they have been found to be suffering from personality disorganization of a serious nature. Use of alcohol chronically, frequently just before the slaying occurred, has been observed.

Some of the homicide defendants were shown to have extremely immature and/or inadequate personalities. One 23-year-old Negro male who killed a taxicab driver by stabbing him had shown personality disorganization seven years before. He had been examined at our clinic when he was arrested on charges of breaking and entering and on charges of malicious mischief. He had broken windows at a school, using an air rifle, and had broken 25 windows of a neighbor's house. Following these incidents he was committed to the State correctional school for boys.

Another immature personality, a 44-year-old Negro male, killed his common-law wife by beating her on the head with a baseball bat. Investigation of his past life showed commitment in the State correctional school for boys in 1919 on a charge of breaking and entering. His adult record with the police began in 1931. Since his first conviction in 1931 he had served two two-year jail sentences, one one-year jail sentence, four thirty-day sentences, one forty-day sentence, and two four-month sentences. Most of the charges against him were assault and battery, usually involving wom-

en. There was one instance of stabbing. In all there had been fourteen convictions for assault and battery. He was a man of average intelligence but one whose ego-strength and ego-integration were weak.

Mental Health In Regard to Homicide Investigation By the Police.

The law enforcement officers are frequently involved in homicide investigation. From the standpoint of mental health, something must be said about the mental health of the policemen involved in the case. It is the duty of the state and municipal police to investigate the killing itself, collecting all the facts about the manner in which the criminal act was done, discovering possible witnesses and clues, and noting information which may be pertinent to the case. They must apprehend the slayer. They should discover whether the accused person has any previous history of violent or other aberrant behavior, or whether he has been mentally ill in the past. The manner in which a homicide is perpetrated is important as it may give significant clues concerning the killer. Frequently the homicide victim has been the aggressor or has participated in a series of incidents which finally culminated in death. A study of 588 consecutive homicide cases which occurred between January 1, 1948 and December 31, 1952 and were investigated by the Homicide Squad of the Philadelphia Police Department, revealed that 150, or 26% of the deaths, were victim-precipitated. Martin Wolfgang, a member of the faculty of the University of Pennsylvania and a participant in the Homicide Squad which investigated the cases, suggested, "It seems highly desirable, in view of these findings, that the police thoroughly investigate every possibility of strong provocation by the male victim when he is slain by a female—particularly, as noted below, if the female is his wife, which is also a strong possibility."²⁷

In making the preliminary interrogation of a person suspected or accused of homicide, the police officers must be very careful not to suggest probable behavior or his own idea of how the homicide was committed. The accused or suspected person

should be permitted to state spontaneously whatever he knows of the killing. In recording the defendant's statements the officer should put down the exact words of the defendant, not the police officer's interpretation or edited version of the defendant's words. This is particularly important in the preparation of a statement for the defendant to sign in which he asserts or denies guilt regarding the homicide charge. The necessity for objectivity on the part of the police officer and the desirability of his reporting factual data can not be too strongly stressed. One writer commented that the more confidence the investigator can instill in the recipient during an investigation, and the more he can put the defendant at ease, the more likely will the defendant tell the truth.²⁸

The investigator's own biases and misconceptions should not be involved in the investigation nor should they color the homicide account. If the officer feels that "cracking the case" may lead to promotion for him, or that failure to do so may discredit him, it may be difficult for him to be objective. The police officers should have well-integrated personalities themselves. An emotionally immature police officer may give vent to sadistic behavior in regard to the defendant or inhibit the defendant through thoughtless, threatening actions. To insure the employment of persons as policemen who are free from serious personality problems the State Psychiatrist of Delaware is requested by the State and City of Wilmington authorities to examine all police applicants as well as applicants of Fire Companies, since the latter at times assist the police officers.

Usually the investigating police officer is anxious to establish a motive for the killing. It may be difficult for a murderer to state his motive for the criminal act. Any significant act has many determinants, and only those reasons which are acceptable to one's conscience are admitted to awareness. An act may be motivated by reasons quite different from those an individual believes to be true. Commenting on the usual practice in legal proceedings of seeking the intent of the criminal in committing the act, Karpman reminded his readers, "Psychiatrists

look upon intent merely as the surface expression of underlying motives."²⁹

The Attitude of the Public In Homicide Investigation.

In discussing mental health in relation to homicide investigation, we must consider the effect of the public on homicide investigation. A murder, particularly if the killer has not been apprehended, is a threat to the community in which the incident occurred and to more distant communities to which the killer may flee in this day of rapid transportation. The public may become so inflamed, however, that proper investigation of the case is severely hampered. A murder which is committed in a bizarre or brutal manner, or one in which a child is the victim, seems to bring from the public a demand for atonement by blood. The old concept of *lex talionis* runs rampant. Law enforcement officers, court officials, juries, and psychiatrists as well, must proceed unemotionally and justly to evaluate the deed and the doer. All the facts must be set forth and used for protection of the defendant as well as of society. The idea of retribution must not be the motivating force in the proceeding. Lawrence Freedman, Associate Clinical Professor in the Yale Medical School Department of Psychiatry and Chairman of the Yale Study Unit in Psychiatry and Law, made the comment, "It takes no expert to know that a reservoir of homicidal aggression resides in the mass of men which can be trapped whenever it is attached to a suitable public symbol."³⁰ George W. Wickersham, who was Chairman of the Wickersham Committee to Investigate Crime and also at one time Attorney General of the United States, stated in one of his reports "that the attitude of society in respect to the criminal was on occasion as lawless as that manifested by the criminal toward society."³¹ The public "desire for extreme criminal sanctions" is based somewhat on subconscious feelings of guilt in themselves.

Society makes no real gains through capital punishment. In a sense, the demand for the extreme penalty is merely public self-gratification. The members of a society express their need for a re-enforce-

ment of their own restrictive mechanisms when they seek to make examples of others. The death sentence for any act of crime is a primitive reaction on the part of the people who establish such a law. The commandment "Thou shalt not kill" is not abrogated through statutes passed by lawmakers and written into their codes.

CONCLUSION

The sanctity of human life makes homicide a serious problem in society. As tensions mount on the national and international scenes, individuals are affected. Deep-seated personality problems may be triggered into aggressive action in personal relationships. All forces must be mobilized to help individuals become better integrated, and to find ways of controlling their aggressive impulses and directing them into socially acceptable channels.

In spite of the best efforts of individuals and groups, however, there probably will continue to be cases of homicide. When these occur, the defendants should be psychiatrically examined before they are tried. The psychiatrist should be asked to present his report as an expert witness competent to give testimony concerning the mental condition of the defendant. He should neither be expected to fit his opinion into the legal definition of mental illness nor be required to participate in determining the verdict regarding the homicide defendant. In the investigation of homicide we must control our emotions and adhere to the principles of humanity. Our job in this world is to create, construct, revamp, and rehabilitate; it is not our job to destroy.

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THE IRRESISTIBLE IMPULSE IN CRIMINAL RESPONSIBILITY

A PSYCHIATRIC-LEGAL PROBLEM

HARRY S. HOWARD, M.D.*

The use of "irresistible impulse" as a defense in determining criminal responsibility is not generally accepted. However in Delaware, as in a number of other states, the Superior Court has spoken of "Deprivation of will power to choose whether to do the act or to refrain from doing it." In Alabama the Court has spoken of the defendant being irresponsible if "by reason of mental disease he has lost his—free agency." Davidson quotes three kinds of irresistible impulse pleas thus: (1) as generated in insane persons—sudden explosive reactions, powered by some urge; (2) impulses of the compulsive neurotic—compulsive stealing, pyromania etc., and (3) characterological defects evidenced by sexual perversions (which are essentially compulsions). Davidson suggests that these do not include crimes committed in a fit of rage, pique or frustration.

These concepts are clear cut. They are intended to determine legal and full responsibility for crimes which might influence a jury in arriving at a verdict of "not guilty because of insanity."

This writer reports three cases which would not be included in the above concepts, which would not satisfy the McNaghten formula, yet which might create the impression of only "partial responsibility" and so assist the prosecuting attorney to arrive at a lesser charge, or the Court to arrive at a more realistic disposition.

CASE NO. 1

This patient is a Negro male, 51 years old and married, charged with having murdered a boarder in his home during an argument in which he felt he was about to

be attacked by his adversary (and later victim) with a weapon. He was quite certain that the man was reaching for a weapon, though no such weapon was found and no one could be produced to suggest that the victim ever had such a weapon.

The defendant had a good work record. He was a regular church attendant. He had had a few minor associations with legal authorities about alcoholic indulgence, though little came of them. He had been married about fourteen years. He had one child. There had been some drinking on the day of the crime, but neither participant was seriously intoxicated.

During the argument the victim had used a considerable amount of profanity of a threatening nature and had allegedly threatened to kill the defendant. He came down the stairway as if to carry out his threat and was shot by the defendant with a shotgun which the latter had borrowed and which had, apparently, been handy at that particular moment.

The examination revealed that he was mentally retarded at the mild level, with an I.Q. of 77. Projective tests revealed inadequacy and insecurity, though with fair ego-integration. There were suggestions of caution, lack of spontaneity and a tendency to avoid new or anxiety-arousing situations.

He was completely cooperative, quiet but loquacious, anxious and passive. There was nothing to suggest psychosis, neurosis or significant characterologic disturbance.

The examining psychiatrist concluded that though there could be no question of the fact that he could be held responsible for his acts, the mitigating concept of "irresistible impulse" could be taken into con-

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sideration and that he would not ordinarily, without unusual stress, commit an act of violence.

CASE No. 2

This patient was an 18-year-old male charged with the murder of his father under rather unusual circumstances. He stopped to visit his father and the latter's common-law wife and children while passing through the community in which they lived. Testimony revealed that the visit proceeded in a friendly fashion. There was no overt evidence of hostility. They talked of fishing, hunting, etc. until the moment of the shooting. The gun had not been brought to the scene of the crime, but was there "by accident." History showed that the father had deserted his wife (the defendant's mother) and left her to care for herself and several children. Deprivation, both physical and mental, resulted, but, until the moment of the crime the defendant apparently had repressed his hostility successfully.

The psychologic examination showed him to be in the dull normal range with an I.Q. of 80.

The psychologist concluded that there was evidence of chronic immaturity and social inadequacy; that he tended to restrict his social behavior to situations in which he felt secure and unthreatened; that there was an attempt at mastering feelings but that explosive and impulsive tendencies could be anticipated. Reality testing was well maintained.

The examining psychiatrist found him to be completely cooperative, but passive and timid. He gave the impression of being shy and uneducated. He discussed his own feelings regarding the situation in which he found himself, expressed regret and then discussed his relationship to his father and and latter's paramour. Indications were that he had a great deal of hostility which, up until the time of the shooting, he had repressed successfully. There was doubt regarding his masculinity, with a suggestion of identification with his mother.

The examining psychiatrist concluded that the act was the result of an irresistible

impulse probably motivated by the breaking through into consciousness of previously repressed material and serving, in addition, as a denial of the feelings of inadequacy while committing an act of aggression.

While he could legally be held responsible for his act, the mitigating circumstance of "irresistible impulse" needed consideration. He was not to be regarded as an individual who would ordinarily commit an act of violence.

CASE No. 3

The patient a white male, age 25 and married, was charged with the attempted murder of his wife and the murder of her paramour. The background history revealed a series of separations and tenuous reconciliations, the latter usually taking place during periods of his wife's difficulties with her paramour. This pattern had begun when the defendant and his wife were in high school before their marriage. The defendant was always ready to take her back, and she used this weakness to taunt him. He was from a broken family and identified himself with his children whose home, too, was periodically broken.

Psychologic examination showed him to be of average intelligence. Social awareness and judgment were adequate. He revealed difficulty in goal-directing his emotional energy within the frame of reality. Objectivity and reality demands were at times bypassed. He attempted to compensate for tremendous feelings of inferiority by aggressive outbursts. Otherwise he showed regression, avoidance and immobilization. He tended to disparage his concept of himself.

In the psychiatric examination he gave repeatedly the history of his own traumatic childhood and the rejecting attitudes of his wife. One noted particularly the defendant's passivism and dependence. Aggressiveness had been repressed and broke through into consciousness only in impulsive explosions.

The examining psychiatrist concluded that, though he could legally be held responsible for his acts and could stand trial,

his act should be considered an irresistible impulse or the breaking through of repressed unconscious material, and therefore a mitigating circumstance.

Three cases of murder are cited to illustrate the breaking through of repressed, unconscious material into consciousness with resulting failure of ordinary controlling ability and resultant acts of great destruction. This author concludes that these people are legally sane (unless one considers

the vague and unsatisfactory concept of "temporary insanity"), and that they legally must stand trial. However, the role of the psychiatrist in describing the personality structure of the defendant and the dynamic factors which went into producing this personality leads to the consideration of the concept of irresistible impulse as a mitigating factor, and can aid the prosecuting attorney in arriving at a proper charge and the Court in reaching a humane and useful disposition of the case.

BROMIDE INTOXICATION: SIMULATING OTHER ORGANIC BRAIN SYNDROMES

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A simple test such as a quantitative serum bromide determination in a patient showing symptoms of delirium or an organic brain syndrome, may enable the physician to arrive at a diagnosis promptly without employing unnecessary diagnostic procedures.

With increasing use of tranquilizing drugs prescribed for psychogenic disorders one is surprised to find that mental disturbances due to bromides are more frequent than is realized. In some psychiatric clinics 2% of all admissions have been found to be suffering from a bromide psychosis. Although psychoses resulting from bromides were frequent in the past, before the medical profession was adequately alerted to the changes which accrued to its prolonged administration, Noyes¹ pointed out that "50% of cases arise through the prescribing of bromides by physicians, the prescriptions, frequently being repeatedly refilled."

Many toxic states are brought about by self-medication through proprietary drugs containing bromide such as "Nervine." This disorder may simulate other organic brain syndromes. Since the psychosis may be short-lived, recognition of this toxic state can avoid transfer to a psychiatric hospital and the patient may be treated in a general hospital. For this reason, a case of bromide intoxication will be described in detail.

A 52-year-old weak, dehydrated white male was committed to the Delaware State Hospital on February 3, 1958 from a local hospital with the following statement on the commitment papers: "The patient has

been mentally confused, noisy and violent at times, has disorders of memory, delusions, partially destructive to clothing and furniture. He had to be restrained much of the time. All tests, including the cerebral spinal fluid examination, were negative. Complained of cold, cough and weakness. Question of an old encephalitis."

Both parents were living and well. The father was described as a kind, sympathetic man and it was said that the mother was devoted to her two sons, of which the patient was the older.

No information was available concerning pre-school and school age growth and development except that there were no serious illnesses suffered during childhood. He was reared in a rural community and the economic status of the family was always precarious. Therefore, the entire family had to work on the farm. Schooling was started at the average age but he left after the eighth grade to help with work on the farm. He married at age 21 and three children were born of this union. He was considered to be a hard, stable and dependable worker whose main concern was his work. He was an abstainer from alcohol.

From birth the patient had a bronchial cyst which was removed in 1950 at the Memorial Hospital, Wilmington, Delaware. He made an uneventful recovery. In 1954 he fell while at work, suffered a comminuted fracture, dislocation of the distal end of the left radius and intertrochanteric fracture of the left hip. Soon after he was taken to the Kent General Hospital, where a close reduction of the wrist fracture and an open reduction with pinning of the fractured left hip were performed. After the accident the

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patient became at times restless and tense and had multiple somatic complaints which consisted of vague pains and aches, occasional dizzy spells, "giddy feelings" and at times insomnia and anorexia. It was noted at the plant where he was employed that he was dropping in efficiency. Nevertheless, he continued to work steadily. He was diligent about his employment to the point that he never missed a day and it was the main interest of his life.

In January 1957 he was admitted to a local hospital with a history of upper respiratory infection, "high blood pressure," weakness and fainting spells which were described as "black-outs," with subsequent loss of recollection of the event. After study and examination, the physician made a diagnosis of Postural Hypotension. Doriden, one tablet PRN and Ephedrine, 3/8 grains daily, was prescribed. The patient was soon discharged from the hospital.

Immediately after returning home he went to work. He became more quiet than usual; withdrawn, restless, insomnic, anorexic and highly preoccupied with all kinds of aches, pains and bizarre symptoms. The family doctor was consulted often but none of the prescribed medicine seemed to satisfy the patient or alleviate any of his discomfort. During May the patient was out of work. He complained continuously, was apathetic, uninterested in any activity and preoccupied with his job. The local practitioner prescribed Phenobarbital and Belladonna.

In June the patient returned to work and began to take Nervine, 1 teaspoonful, t.i.d. He stated that he began to feel better, more energetic, and that his preoccupation decreased. He worked until the beginning of January 1958 but continued to have previously described symptomatology to a lesser degree.

Four weeks prior to his admission to the Delaware State Hospital, the patient developed fever, cough, restlessness, irritability and pain in the neck region. After the family physician was consulted he was referred to a local hospital. Laboratory tests were within normal limits. During hospitalization the patient continued to be preoc-

cupied with his work, talked continually about it, and became restless. He soon became incoherent, was afraid of harm being done to him and was noisy and violent. He was placed in restraints and was given three different types of tranquilizers, which did not alleviate any of his symptoms. Because he was so disorganized, agitated and confused, he was transferred to the Delaware State Hospital on February 3, 1958.

On admission the patient was overtly confused, incoherent and disoriented in all three spheres. Intellectual functions were grossly impaired. He was restless, uncooperative, could not follow commands and was slow in his movements and responses. He talked in a monotonous tone of voice or mumbled. He was unaware of his surroundings and continued to show aggressive behavior as in the general hospital. He was restless and wandered about the ward.

Physical examination on admission revealed the patient to be pale, poorly nourished, dehydrated and older than the stated age. Blood pressure was 115/75, pulse 84, temperature 98.6°. Heart sounds were of good quality, with no arrhythmia. Respiratory organs were normal to auscultation and percussion. The abdomen was soft. Liver and spleen were not palpable. There were no masses and no tenderness. Genitourinary organs were negative for pathology. Neurological examination revealed the following: cranial nerves were intact, including the fundoscopic examination. Cutaneous and deep sensibility could not be adequately tested because of the confusion of the patient. All deep tendon reflexes were present and active. No pathological reflexes could be elicited.

Laboratory findings revealed the following:

February 3, 1958

Urinalysis: Albumin 1+

Blood Wasserman non-reactive

Spinal fluid cells 2, protein 30, Gold curve flat

Wassermann non-reactive

Fasting blood sugar 103, Urea Nitrogen 34.5

Creatinine 1.50, RBC 4,600,000 Hgb. 15 WBC 6200,

EEG: Routine 16 lead EEG was slightly slow in all leads. Sleep was normal.
EKG: Tracing was within normal limits.
X-ray chest and skull: normal.

February 10, 1958

Urea Nitrogen 23.7

Creatinine 1.45

February 11, 1958

Bromide Level: 154 mg/%

February 17, 1958

Bromide Level: 4 mg/100 cc serum

March 3, 1958

Bromide Level: less than 100 mg/%
(Delaware Hospital).

Bromide Level: 41 mg%100, control
0 mg/100 (Delaware State Hospital)

March 6, 1958

Spinal fluid: protein 29, Bromides 5
mg/% cells 0, RBC 4,100,000, HBG
12.8 WBC 1800

Bromide Level: 20 mg/100 cc., Uri-
nalysis negative

March 27, 1958

G.I. Series, Lumbar Vertebrae:

Routine films showed normal filling of the stomach and duodenum, at five hours the stomach was empty and the head of the meal had reached the descending colon. Impression: Normal upper-gastro-intestinal tract. Examination of the lumbar vertebrae showed no evidence of pathology.

April 2, 1958

Barium enema showed normal colon

April 14, 1958

RBC 4,290,000, Hgb. 13.1, WBC 9,500

For the first 48 hours the clinical picture remained unchanged. However, on the third day following admission he began to show remarkable changes. He became alert, partially oriented and was able to recall events of the past 24 hours.

On the fifth day there was evidence of greater modification. He was fully aware of his surroundings, relaxed, well oriented

and could give a complete account of his activities for the last four days. He began to gain weight, was communicative and began to help on the ward.

By the end of February the patient began complaining on several occasions of "dizzy spells." He was seen in consultation by our neurologist on February 19, 1958. The neurological examination revealed that responses were slow to questioning and concentration impaired. There was no evidence of increased intra-cranial pressure of a localizing cerebral lesion. It was the neurologist's feeling that this man's clinical picture could be explained on a basis of an organic mental syndrome associated with chronic bromide intoxication. However, the consultant felt that several other studies should be done for complete investigation of the "black-out" spells. All subsequent studies, including G.I. Series, barium enema, etc., failed to reveal any pathology. A repeat EEG on March 11, 1958 was within normal limits.

By March 8, 1958, the bromide level had dropped to 20 mg/100 cc. The patient continued to improve. On April 17, 1958 he was discharged.

DISCUSSION

A case of bromide intoxication was presented in detail: Three days after his admission to this hospital, he began to show evidence of improvement. A subsequent quantitative serum bromide determination was 154 mgm/%, confirming the clinical diagnosis. Once the diagnosis was established, the reason for the intake of the bromides was thoroughly investigated.

This case was reported in order to remind physicians that in all organic brain syndromes a diagnosis of Bromide Intoxication should be considered and that toxic states, as a result of bromidism, are not uncommon.

OUTLINE OF PSYCHIATRIC EDUCATION AT DELAWARE STATE HOSPITAL

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The following is an attempt to consider the training facilities available at the Delaware State Hospital at Farnhurst for residents.

While it can be stated that psychiatrists never have agreed on a set of basic principles to be applied to the training of future specialists in their own field, certain principles have been recognized as generally valid. The following article is an attempt to evaluate existing facilities for training at the Delaware State Hospital in the light of accepted requirements.

The core of resident training in psychiatry is and probably always will be supervised contact between resident and patient. It should be extensive at times and intensive at others, and should be evaluated carefully and repeatedly by the resident and his counselors.

Patients have been our best teachers. The Delaware State Hospital (the only mental hospital in the state) admits psychotic and non-psychotic patients with the application of a minimum of selection, a fact which greatly facilitates the recognition of epidemiological, prognostic and diagnostic factors of mental illness.

Supervised day-by-day contact of the resident with a representative number of patients on admission services, and additional information regarding other groups of patients obtained in conferences, provide the resident with a sound knowledge of phenomenology, diagnostic acumen and a valuable sense of proportion in matters pertaining to his science. This knowledge often is less developed in residents trained in hospitals where patients are studied more intensively but in small numbers.

On the other hand, in another area and phase of training contact between patient and resident should be more prolonged, both in duration of individual sessions and total length of therapy. Such intensive contact makes the resident aware of the crucial importance of the patient—therapist relationship and, in conjunction with careful supervision, teaches him the principles and techniques of relationship management.

At this hospital intensive study of designated ward patients is limited by time and case loads of residents. Recently, psychotherapeutic night clinics have been instituted. Here the resident sees selected, previously hospitalized patients in weekly therapy sessions, and in weekly seminars, attended by residents and senior physicians, discusses therapy problems of transference, counter-transference and progress.

Partly because of the inability of psychiatrists to agree on basic principles of training, psychiatric centers for training tend to carry their stamp of individuality and to have their own hospital philosophy.

Teaching in this hospital attempts to be eclectic in the sense of non-adherence to any one doctrine. It attempts to impress residents with the fact that our knowledge in psychiatry is incomplete and inconclusive, and that we need to remain open-minded.

Most state hospitals, including our hospital, emphasize various somatic and social therapies. All common types of somatic therapy (except deep coma insulin) are used extensively, and the use of drugs is studied with great care.

It frequently is stated that the resident, as training progresses, should shift the em-

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phasis of study from purely descriptive aspects of cases to investigation of the dynamics involved. Psychodynamics, however, present psychiatry and psychiatric teaching with great and unsolved problems. Not only is the state of motivation theory uncertain and divided, and therefore doctrinaire, but also dynamic formulations attempted in all forms of mental illness frequently are speculative, oversimplified as to cause-effect relationship and lacking in efforts at integration of intrapsychic development with interpersonal contemporary factors.

Psychodynamic considerations and formulations are nevertheless important aspects of suitable case studies and should be encouraged in spite of their speculative nature.

Furthermore, emphasis on motivation will make the resident aware of the significance of teamwork in psychiatry—such as contributions made by social workers, psychologists, etc.

As in the case of most state hospitals not situated near universities, this hospital cannot readily assemble a large staff to teach psychiatry in formal lectures, nor would an extensive didactic program necessarily be advisable. However, most senior staff members hold faculty appointments at the University of Pennsylvania in Philadelphia. Lectures are given at regular intervals by the Clinical Director and Preceptor teaching is done by senior members of staff. Residents attend weekly psychotherapy seminars. In our "Academic Lecture Series" nationally known outstanding scientists, working in psychiatry and related fields, have talked on topics of special interest. Neurology, neuropathology, neuroanatomy and physiology and electroencephalography are taught in seminars by lecturers from medical schools in Philadelphia, Pennsylvania.

The psychiatrist now assumes responsibilities far beyond his original province of

the mental hospital and, for this reason, resident training should include out-patient work with adults and children, some in-patient work with children and work with community agencies, courts, etc. Residents at Delaware State Hospital get their experience in these lines at the Governor Bacon Health Center and at the Mental Hygiene Clinic.

Training also should be provided in public speaking, work in the psychiatric unit of a general hospital, consultation work with other hospitals and work with psychosomatic patients. It is agreed that research interests should be stimulated and that residents should be given opportunity to do research, a definite research altitude being the goal. Teamwork is desirable. Methodology, documentation and principles of research statistics should be taught. The Delaware State Hospital has a research department which is at present engaged in the following studies: (1) clinical effectiveness of psychopharmacological therapies, (2) implications of social and clinical aspects on course and outcome of schizophrenia, (3) cerebral bloodflow and Metabolism in psychiatric disorders. Some residents have received special training and participate in these projects.

In conclusion, something should be said about the way in which teaching should encourage the resident to develop his own individual life-style as a psychiatrist. Identifications with one or two teachers out of keeping with the resident's personality tendencies should be avoided. Therefore a large number of teachers is an advantage, and additional training during the residency period, such as personal analysis, etc., may be desirable. Opportunities for additional training should be offered.

The Delaware State Hospital, being close to Philadelphia, offers definite possibilities along these lines.

"NO ROOM AT THE INN"

FRIEDA R. HENDELES, M.D.*

The history of mental illness has been one of alternately changing accent, from the physical methods of treatment to the humane aspects of social reform and community responsibility. The earliest known references to mental disturbance were contained in the early Egyptian papyri but views as to family responsibility already were being expressed by the Greeks, notably in Plato's "Republic:" "If anyone is insane, let him not be seen openly in the city, but let the relatives of such a person watch over him at home in the best manner they know of, and if they are negligent, let them pay a fine."

In more recent times, family and community responsibility have become increasingly recognized among progressive and enlightened peoples. In this country the Veterans Administration and a number of State Hospitals are active in the development of family and community participation in the treatment and rehabilitation of the mentally sick person. What, then, is happening within our own state, and what repercussions are being felt within our own psychiatric hospital?

Once an emotionally sick person has left the family circle for more than six months, the gap gradually closes to exclude his return at a rate in direct proportion to the length of absence. By this time, relatives have reorganized their lives in such a way that the patient can no longer be accommodated, or the members of the family have lost interest and do not want to have him return. Or perhaps they have moved, or the remaining relatives have died. Thus the door of return has virtually been slammed in the face of the sufferer.

Often relatives, as well as the community at large, behave as though they were being imposed upon when attempts are made to

replace individuals who have been sick but are ready for rehabilitation to the status of useful and worthy citizens. They do not seem to understand that the returning patient is a calculated risk and, therefore, infinitely safer than the undiagnosed mentally disturbed persons who constitute a sizeable portion of our community.

Many patients, often middle-aged or elderly, who in their effectively functioning periods have been good citizens, are forced to live constricted and purposeless lives because the community which they have served so well is no longer tolerant of, or interested in, their welfare, their only fault having been that of emotional sickness—the unjustly condemned. This response differs little in essence from that of Biblical times when the leper and the pariah were cast out.

Repercussions of such treatment by the community are of a dual nature. Since the patient has nowhere to go and often is refused the opportunity to work, he comes to feel useless and rejected, with consequent feelings of utter futility which sometimes lead to relapse and chronic institutionalization with a state of apathy and automatism. This causes a steady increase in the resident hospital population, with consequent overcrowding. It results in reduction of beds available for treatment of acute conditions. Such delays prolong the course of the illness, depriving the family of its breadwinner or young children of their mother's care for a longer time than necessary. Modern drug therapies have not directly increased the number of "cures" but they have made it possible to reach patients more readily with rehabilitation methods, thus mobilizing and socializing a large number of people who otherwise might have slid down the path to eventual chronicity and prolonged hospitalization.

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It must be remembered, however, that institutional residence for even a few months requires gradual adjustment to the conditions of existence in this pressured, competitive world of the jet age. Rehabilitation within the hospital, although an essential factor, is not enough. Several transition stages *outside the hospital* have to be traversed in the successful crossing of the bridge to mental health and a full life. The ground for such transition stages is now in the process of preparation but for the success of such a program, each individual member of the community must contribute to the shared responsibility between the mental health services and the community. What, then, are the mental health services doing to further the cause of the mentally sick in this state and how can members of the community help in this vital task?

For the past two years the state hospital has maintained a program relating drug therapy to rehabilitation outside the hospital. It is under the regular supervision of a visiting nurse to the home or place of residence of the patient, thus enabling patients to step onto the bridge earlier than would otherwise have been possible. More recently, evening clinics have been opened at the hospital for continued treatment of patients who otherwise might have had to prolong their stay in the hospital.

Activities of the Mental Health Association include education of the community in mental health through films, lectures and the press; provision of seminars for the clergy of all denominations and provision of vocational training for patients with the trojan task of job placement and sometimes provision of living accommodation. The two latter are, perhaps, the most difficult tasks, requiring energetic, enthusiastic and consistent support from the community as a whole. Valuable and devoted work is being done by Volunteer Workers, and a plan is under construction for the most efficient utilization of their generous assistance.

The role of the family physician is an important one within the community and perhaps has not been appreciated to its fullest extent. One of the laudable features of the doctor-patient relationship is the in-

terest and counsel which the personal physician extends to the family of the mentally sick patient during the first few months of his hospitalization. However, in the later stages of the patient's illness when, perhaps, a year or more has passed, the strength of the relationship is no longer directed toward "keeping the chair warm" for the return of the sufferer—apathy has set in. A change of emphasis is urgently required on the part of both hospital authorities and family physicians. If this valuable solicitude could be transposed from the onset to the later stages of the patient's illness, much more could be accomplished toward the solution of one of the most urgent problems of mental health—that of keeping the door open for the patient's return to the community.

The responsibility of the community lies in accepting the patient and providing employment, a place of residence and social activities. Volunteer workers could give help in many ways. They could approach industrialists, whom they often know personally, for employment of patients. Such action helps create a sense of usefulness and responsibility not only in the patient but also in the community.

Through the medium of volunteers and civic organizations, the community can provide for a pressing need: a temporary haven for groups of patients who are ready to face everyday life again but who have nowhere to go because there is "no room at the inn." In California, volunteer workers have set up such havens and are running them with success. The required type of residence could be run simply and inexpensively for groups of eight or ten patients in a house assisted by a house-mother with visits from a community physician once weekly, the latter keeping contact with the psychiatric hospital for information and advice. Patients receiving special medication could be visited by the Home Care nurse from the hospital. Such groups could develop methods of self-management, some doing the cooking, some the housekeeping, while others go out to work to help maintain the home. Experiments such as this have been carried out successfully in Australia. A further development of this theme would be the formation

of a social club for these and other ex-patients within the area, thus unifying the provision of their needs.

A more ambitious program is that of the foster home placement of patients, another of the necessary arms of rehabilitation. This, however, requires an advanced stage of mental health education of the community as well as a large number of social workers with provision of generous finances by the community. Such programs already are in successful operation in many states.

Let us, the members of the community, therefore allow light into the places of darkness give understanding and help to those who, but for the grace of God, might be one of us.

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OBSERVATIONS OF CARDIAC PATIENTS SUBJECTED TO ELECTROCONVULSIVE THERAPY

DAVID J. REINHARDT III, M.D.*

The improvement which frequently occurs in mental states when treated by electroconvulsive therapy is well known. Those most familiar with this type of treatment also are aware that it is not without a certain mortality rate, especially in patients afflicted with cardiovascular disease. Because of the physician's respect for the results of electroconvulsive therapy, cardiac patients often are denied the benefits of this type of treatment. It is the purpose of the author, in conjunction with the psychiatric staff at the Delaware State Hospital, to follow closely a series of patients with cardiac disease through a course of electroconvulsive therapy (ECT) in an effort to derive a safer procedure whereby more elderly cardiac patients with mental illness can be helped.

Data is relatively sparse concerning mortality from ECT. Maclay,¹ with the help of statistics from the British Ministry of Health, reported 62 deaths in four and one half years in the British Isles. The number of patients treated during this period was not known. Alexander *et al*² reported five deaths in 5,325 patients who received 70,000 treatments at one mental hospital. This would indicate approximately one death per 1000 patients receiving a course of ECT. Kalinowski *et al*³ quote a fatality figure of 0.06% from a survey by Kolb and Vogel⁴ of 305 mental hospitals. This probably is closer to the accurate figure because of the scope of the study. However, if one were to limit the observations to those in the poor risk category because of cardiovascular disease, the incidence might well be in the realm of one death in 100 to 300 patients.

Should one reject for therapy the whole poor risk group for the sake of possibly preventing one catastrophe? The usual answer, without considering details would unequivocally be "Yes!" However, if we recognize the fact that the majority of patients in the age bracket susceptible to cardiovascular disease are suffering from involutional melancholia or reactive depression, and most cases have been productive members of the community, and that a return to this status frequently can be achieved by a course of ECT, then the answer must be that of taking a calculated risk and proceeding with therapy. In addition to this esoteric reasoning one must realize that such patients often are suicidal either by overt act or more passively by a refusal to eat, which leads to weight loss, malnutrition, starvation and eventual death. When these factors are considered in the individual case, the decision must be made as to whether the calculated risk or the ultimate outcome is the desired course.

PHYSIOLOGIC BACKGROUND

Any patient undergoing ECT goes through certain stages with respect to body physiology.⁵ Often there is a marked degree of anxiety and fear in anticipation of treatment. This is followed by a release of adrenal hormones, the most evident of which are epinephrine and norepinephrine, which cause a tachycardia of variable degree and arterial blood pressure elevation.

The tachycardia is further propagated by the increased tone of the autonomic nervous system. With treatment the electrical discharge is conducted through the cerebral hemispheres and the tonic convulsive phase

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appears with the immediate onset of apnea. The clonic phase follows, and only after this has terminated does respiration begin again. In the normal heart this period of anoxia may last for as long as 90 seconds and is rarely dangerous. As respiration begins, a strong vagal "storm" usually follows, with multiple cardiac effects. Especially affected are the rate, the site of impulse formation and atrioventricular conduction. At this stage the systolic blood pressure is considerably elevated and remains so for a period of 30 minutes to one hour. These effects slowly subside as the patient is reoxygenated and returns to the conscious state.

In the patient with severe cardiac disease this course of events is dangerous. At the termination of the convulsion, myocardial anoxia is intense, and the difference in tissue oxygen tension between healthy heart muscle and fibrotic, ischemic myocardium is acute. It is this difference, according to Beck⁶, which increases myocardial irritability at the junction zones and initiates ventricular extrasystoles. The added factor of acute cardiac dilatation during the convulsion adds to the irritability. The physiologic accentuated vagal influence at this point adds further arrhythmic potential to the already over-stressed heart. In addition to this, extensive coronary atherosclerosis injects myocardial ischemia which, if prolonged, may lead to subendocardial necrosis or infarction. Therefore, it is obvious that cardiac patients undergoing ETC are exposed to a form of excessive stress unimaginable to cardiologists of 30 years ago.

The following group of patients with heart disease were closely observed at the Delaware State Hospital while undergoing ECT. These cases illustrate many dangerous developments for which one must be alert, and also suggest therapeutic methods for increasing the safety of such patients.

METHODS AND MATERIALS

The patients chosen for this study were in extremis from the depression of their mental illness and all were suicidal or so negativistic as to necessitate in many instances feeding by nasogastric tube. They had not responded to chemotherapy which

had been tried. The diagnosis of cardiovascular disease to a degree of severity to warrant a "poor risk" classification was made by either a substantiated history of myocardial infarction, evidence of congestive heart failure, hypertension with advanced cardiac hypertrophy or a valvular lesion with chamber enlargement. In every instance an electrocardiogram was abnormal.

Eighteen patients were studied, nine male and nine female. The female age range was 48 to 84 years, with an average of 72.7 years. The male age range was 43 to 73 years and averaged 65.7 years. The total number of separate ECT given was 130. Eight patients were refused consideration because of advanced disease such as recent myocardial infarction, acute congestive failure or extreme irritability of the myocardium not responsive to quinidine. Three patients in the series were being maintained on digitalis.

The diagnostic categories are listed in Table I. Total diagnoses show more than 18 because several patients had more than one condition. Patients with pulmonary disease also had coronary artery disease. One female patient, classified as having coronary disease on the basis of history and an abnormal electrocardiogram was proven, following the course of ECT, to be an example of the unstable "T" wave syndrome and was reported elsewhere.⁷ It is likely that she had a normal cardiovascular system.

Each treatment was monitored by a continuously running electrocardiogram, stopped only while the convulsive stages were in progress. At most treatments a cardiologist was present. Following each patient's course, a standard 12 lead electrocardiogram for comparison with the pre-treatment tracing was done. In most cases pre-ECT medication was not given until after it was evident what type of abnormality was likely to develop. This seemed to be a more sensible course than giving a number of drugs and medications to each patient and risking an unnecessary drug reaction.

The average number of ECTs was 8.3 per patient. The range was from 1 to 16 treatments. Three patients received one or two

treatments only, due either to request for cessation of the program by the family or evidence of a marked myocardial irritability which was of a magnitude uncontrolled by drug therapy.

The blood pressure in this series was not continuously measured during treatment.

RESULTS

There were no deaths in this group. There were no cerebrovascular or coronary incidents. The only complications were transient in nature and left no permanent damage. The complications can be divided into the "pre-ECT" and "post-ECT" categories with further subdivision as indicated:

1. *Pre-ECT*: In this division the main factors are (a) the anxiety of the patient, with subsequent effect on heart rate and myocardial irritability and (b) the presence of a relative bradycardia.

Anxiety or anticipatory fear played a significant part in the courses of four patients. In this group the *pre-ECT* heart rate was noted to increase steadily with each successive treatment. When the rate reached and exceeded 130 per minute there appeared to be a marked increase in ventricular irritability, as evidenced by frequent ventricular extrasystoles, ventricular bigeminy and a tendency towards transient ventricular tachycardia. Quinidine was of no value as a prophylactic measure in this group. A significant improvement was noted, however, when the patient was given 225 mgm (gr. $3\frac{3}{4}$) of amobarbital sodium intramuscularly one hour prior to treatment. In this type of patient the progressive increase in agitation or apprehension makes fairly heavy sedation a necessary preventative measure. Ventricular tachycardia is the forerunner of ventricular fibrillation, which usually results in sudden death.

The term "bradycardia," when used in relation to the *pre-ECT* pulse rate, may be defined as a heart rate which does not accelerate more than 75 per minute when the individual progresses beyond the first treatment. The average

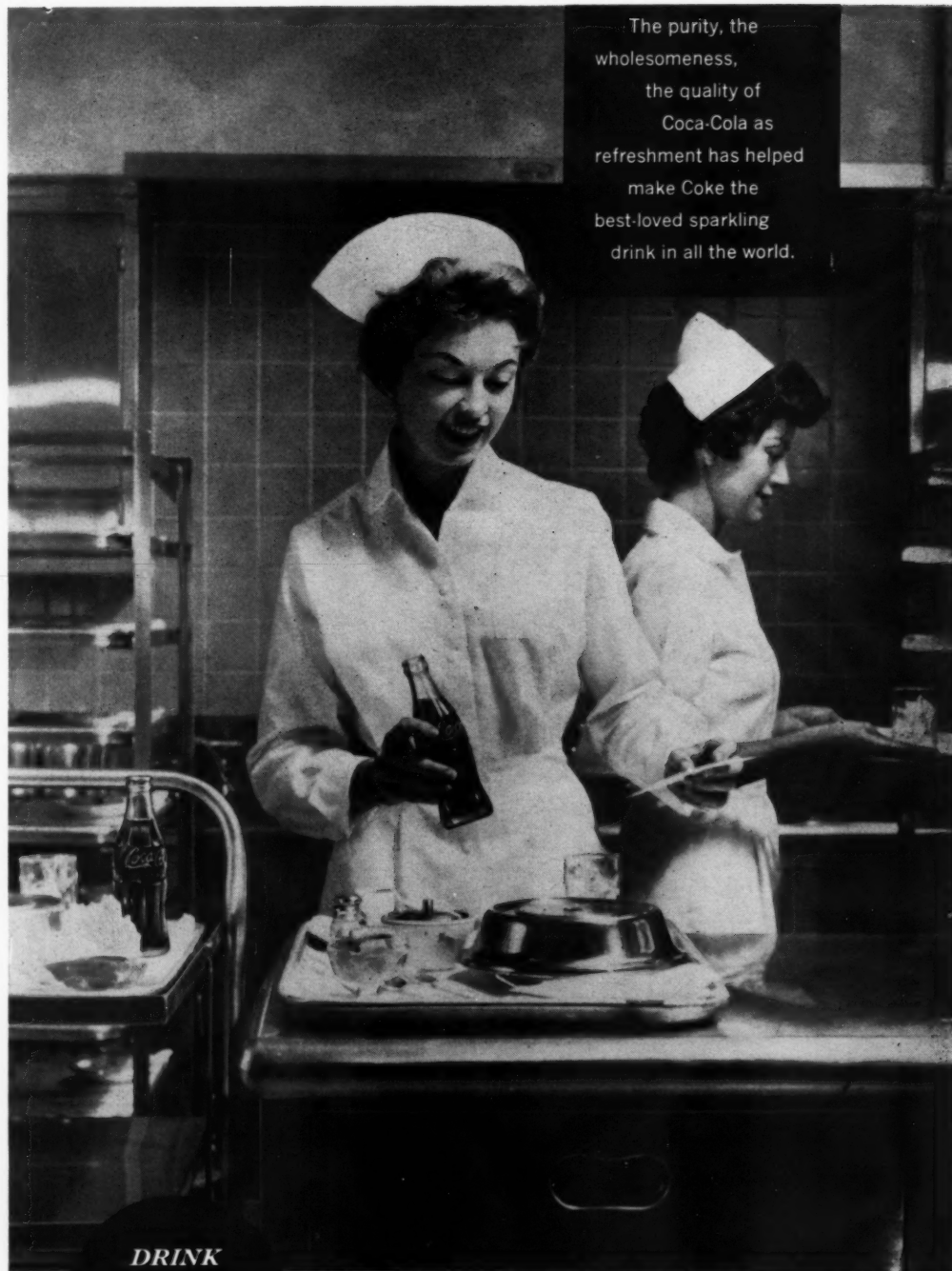
patient, after the initial treatment, usually has an increase in heart rate to between 80 and 110 per minute. Three patients in this series showed this abnormality. Each developed severe *post-ECT* vagal effects. The danger, in this instance, comes during the vagal "storm" and may result in cardiac asystole, which again may cause death. None of these patients developed asystole but each showed marked vagal effect by manifesting either nodal rhythm, sinus arrhythmia, various degrees of atrioventricular block, sinus arrest, atrioventricular dissociation or shifting pacemaker. These changes occurred either alone or in combination. By using atrophine in doses of 1 mgm (gr. $1/60$) these abnormalities could be completely prevented.

2. *Post-ECT*: In this division the vagal and extravagal arrhythmias and ischemic changes are the primary dangers. The method of Mann and Burchell⁸ is used for classifying the frequency of ventricular extrasystoles. Table II lists the number of patients developing each type of abnormality in this series.

The only patient who failed to demonstrate any electrocardiographic abnormality was the one already mentioned who had the unstable "T" wave syndrome. Each treatment in this case resulted in return to a normal tracing immediately following the convulsion, despite a definitely abnormal "T" wave pattern in each *pre-ECT* tracing. This patient also showed the progressive "anxiety" type of *pre-ECT* tachycardia pattern, but failed to show significant evidence of increased ventricular irritability with a rate as high as 130 per minute before treatment. From these findings it was postulated that the patient would give positive responses in all tests for neurogenic "T" wave instability and also have a normal ballistocardiogram. These postulations were later proven to be so.

Two patients with chronic pulmonary disease and coronary disease caused anxiety on the part of the observers. Without prior medication on the first

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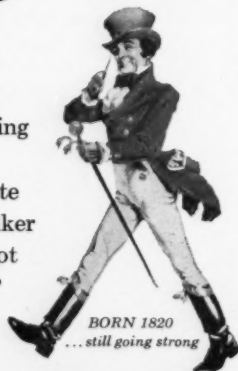


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ECT each patient developed and maintained a profound, livid cyanosis, propagated by diffuse bronchospasm and respiratory obstruction from tenacious secretions. The anoxia produced an intense increase of ventricular irritability. The labored respiratory efforts lead to a pronounced accentuation in the vagal "storm" phase, with subsequent extensive vagal arrhythmias.

It was found that intramuscular Aminophyllin, 450 mgm. (gr. $7\frac{1}{2}$), given one hour before treatment improved the bronchospasm. Atropine, 1 mgm. (gr. $\frac{1}{60}$), effectively abolished the vagal complications. Saturation of the patient with 100% oxygen for two minutes immediately prior to treatment reduced the *post-ECT* cyanosis to an almost undetectable level.

These patients finished their courses of treatment with rare ventricular premature contractions as the only manifestations of what at first appeared to be a grave situation, with either a patient mortality or deprivation of further treatment as the alternative choice.

The routine of saturation with 100% oxygen was found to be useful in patients showing *pre-ECT* ventricular irritability or extensive myocardial scarring. This compared favorably with the use of quinidine as a suppressant of abnormal myocardial irritability. However, the combined use of oxygen saturation and quinidine was most effective in reducing the extra-vagal complications to a minimum. The ensuing treatments were tolerated without danger by most individuals.

The patients observed in this series were consecutively treated over a 12-month period, so that the early cases did not benefit from the prophylactic therapeutic measures clarified later by experience.

In this series myoneural blockade was not used, contrary to advice from others,⁹ because anesthesiologist support was not always available. While this type of modifica-

tion to *ECT* would appear to offer certain advantages, it is the author's opinion that its use should be restricted except in those instances where members of the anesthesia department are in the treatment room. Also, occasional severe untoward reactions occur with these agents which are unpredictable and could easily cause death in patients with damaged hearts.

SUMMARY

Electroconvulsive therapy can be effectively carried out on most patients with severe cardiovascular disease. Observations of 18 consecutive patients undergoing a total of 130 treatments successfully are herein reported. Continuous electrocardiograms taken during the convulsive episodes seemed necessary to indicate which type of specific supportive therapy was to be given the patient during the subsequent course of treatment. The use of "shot gun" prophylactic medication is to be discouraged, as is the use of myoneural blockade without extensive precautions.

Coronary artery disease.....	16
Hypertensive cardiovascular disease.....	3
Chronic pulmonary disease.....	2
Rheumatic heart disease.....	1

TABLE I: The diagnostic categories of patients in this series:

Vagal Arrhythmias

Sinus Arrhythmia.....	1
Sinus Arrest.....	6
Incomplete A-V Block.....	4
A-V Nodal Rhythm.....	4
Shifting Pacemaker.....	2
A-V Dissociation.....	2

Extra-Vagal Arrhythmias

Premature Ventricular Contractions	
Rare	5
Occasional	5
Frequent	8
Bi or Trigeminy (Ventricular).....	1
Ventricular Tachycardia.....	3
Auricular Premature Contractions....	3
Auricular Fibrillation.....	1

Ischemic Changes

Total Number.....	9
Abolished with Oxygen.....	3
Improved with Oxygen.....	1
Not Improved with Oxygen.....	2
Not Tested with Oxygen.....	3

TABLE II: *Post-ECT* changes noted in the electrocardiograms of 18 patients undergoing courses of electroconvulsive therapy.

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CASE STUDY OF TRAUMATIC EPILEPSY

C. LAWRENCE R. SOUDER, M.D.*

A male patient, age 19, was admitted to the Delaware State Hospital on regular commitment papers in November 1928. He had been a patient in a general hospital before coming here, and except for interim visit periods, he has been here continuously since the above date.

History showed that the father drank alcohol excessively. The mother neglected the children and left her husband about 8 years before the patient was admitted here. The family had not seen her since that time.

In November 1923 the patient was injured by a fall or jump from a trolley car. He was unconscious and was taken to a general hospital. Examination revealed a depressed fracture of parietal and occipital bones, with epidermal hemorrhage.

Shortly after this accident the family noticed a change in the patient's personality. Prior to the accident he had been friendly, witty and well liked. He was easy to discipline. Following the accident he became disobedient, resistive and disorderly. He also began to drink alcohol excessively.

In November 1923 he was operated on at a general hospital for removal of the depressed fragments. In 1924 he had another operation at the same hospital prior to his admission here. Epileptic seizures commenced after the second operation and recurred about every three months. They were grand mal attacks, with loss of consciousness for about five minutes, then a dazed condition of 10 or more minutes frequently was followed by another seizure. He worked in a woolen mill for about six months but had to leave because of the attacks.

At the time of admission to the Delaware State Hospital the commitment

papers indicated that the patient was suffering from depression, irritability, disorders of memory and incoherence. Progress has been marked by conflicts with other patients and excessive irritability at times. He was boastful and, on occasions, inclined to be jealous. He liked attention and was always eager to talk about his condition. There has been a more or less constant hypochondriacal trend. He became loud at times and showed mood fluctuations and temperament changes characteristic of epileptic patients. He was pleasant and likeable when things pleased him but might change suddenly on slight provocation to antagonistic, aggressive and belligerent behavior. He became arrogant, demanding and sarcastic, and was argumentative if he could not have his own way. He usually became more friendly in a few days, however. When well enough to do so he took part in activities and work assignments.

In neurosurgical consultation it was advised that the patient have a cranioplasty to close the defects in the head and, following that, an occipital bone flap and resection of scar tissue. The findings were described as severe and generalized underlying brain damage.

He had an operation in March 1954, at which time excision of the occipital pole was carried down to the ventricle. Since the operative procedure was lengthy, no attempt was made to cover the bony defect at that time. He had several continual seizures prior to and immediately following the operation. During the ensuing weeks the seizures were more easily brought under control and the weakness of the right side and the aphasia, which was present prior to the operation, decreased. He continued to have petit mal seizures involving the right side of the face, which drew the mouth to the right. He also had numbness in the right foot, ascending to

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the level of the eye but not always followed by a convulsive seizure.

In February 1958 he developed status epilepticus, consisting of focal and generalized seizures which were believed to be related to left cortical scarring due to trauma. The status epilepticus was controlled by Sodium Luminal intravenously. Subsequent doses of Sodium Luminal were given intramuscularly. He was given Dilantin Sodium intramuscularly three times a day. When in the continual seizure state, and after the seizures were controlled, he was given Mysoline orally. A spinal puncture was performed for control of the status epilepticus.

In March 1958 he complained about once weekly of weakness and numbness of his right arm and the right side of the face. This lasted only a few seconds. These appeared to be mild seizures which had not as yet been controlled but which have been much less frequent since that time. At times he complained of a tingling sensation in the right leg, with sudden weakness, at which time the knee would buckle under him. This sensation would begin in the right foot, go up the leg to the hip, and through the body. The calf muscles of

the right leg became hard in contraction and caused some pain. He needed to hold on to something to remain erect, standing on the left leg. This has resulted in some uncertainty in walking. As personality disturbances, irritability, threatening and abusive behavior, temper tantrums, etc. are recognized as epileptic equivalents, the attacks would seem to be of this nature.

He is receiving Dilantin Sodium $1\frac{1}{2}$ grains three times a day; Mysoline, 250 mg. at 8 a.m., 250 mg. at 12 and 500 mg. at 8 p.m. daily; and Mebaral, 100 mg. three times a day.

Up to this time there has been no essential change in his mental condition from that described above. His orientation in all spheres and memory are fair. He has ground privileges. His range of general knowledge is fairly well preserved.

In the above case patient had sustained, due to trauma, extensive and diffuse brain damage. The original cortical scar was excised and he was continued on medication. An amelioration of some of the symptoms was accomplished.

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+ Editorial +

ONE MORE PLUS FOR THE STATE OF DELAWARE

Statistics regarding the rates of homicide and rape indicate that execution of persons convicted of these crimes has not been effective in preventing such crimes. Nor have states and foreign countries which have abolished capital punishment experienced an increase in the rate of homicides, rape or other crimes punishable by death. Rather, there has been a decrease in the rate of such crimes.

Most of the cases of homicide and rape in Delaware which were examined by the State Psychiatrist were not "insane" from the legal viewpoint. However, though not mentally ill, the defendants possibly were suffering from some deep-seated psychiatric problem. Most of them were rational and were able to distinguish right from wrong. They knew the crime they had committed was wrong according to the laws of man and God. The number of frankly psychotic persons among the perpetrators of homicide and rape is usually small. Those who suffer capital punishment are generally the poorly educated who act from primitive emotion, and whom we, as the surrogates of society, have not yet been able to reach.

Society makes no real gain through capital punishment, and since executions have not been a deterrent to crime, capital punishment seems merely to be public self-

gratification. The demand for extreme punishment is our wish to satisfy our own emotional reactions by vengeance. Apparently it has not occurred to us that death may not be punishment to murderers but instead may bring instant relief from the pangs of conscience which should be experienced by the individual who deprives another of his life or who ravages or defiles another.

The death sentence for an act of crime is a primitive reaction on the part of people who establish such a law. The commandment, "Thou shall not kill," is not abrogated through statutes passed by lawmakers and written into their codes. No one has the right to destroy a human life regardless of what that human being has done.

No one is more aware of this philosophy of the preservation of human beings than members of the medical profession whose principle as far back as Hippocrates has been to create, construct, revamp and rehabilitate, and not to destroy.

The General Assembly of the State of Delaware and the Governor are to be commended for passing the bill abolishing capital punishment, thus making the State of Delaware one of the first seven states in the United States to have passed such legislation.

MARSILID* ACTION AND SIDE-EFFECTS

C. P. TURNER, M.D.**

This paper presents a preliminary report on treatment with Marsilid of 40 mentally ill patients. They were selected on the basis of certain symptoms with no regard to sex and were from 22 to 75 years of age. There were 8 men and 32 women in the group. The diagnoses varied, but the patients had in common apathy, withdrawal and psychomotor retardation. The diagnostic breakdown is given in table 1.

Table 1

Schizophrenia	25
Affective Disorders	11
Psychoneuroses	1
Chronic Brain Syndromes	2
Mental Deficiency	1
Total	40

The length of treatment was from 10 to 98 days, with an average of 33.4 days. The largest daily dose was 450 milligrams, given in three divided doses of 150 milligrams each. The average dose was 176.5 grams.

Patients were observed for physical as well as psychic changes. Some patients showed an increase in activity, but it could not always be considered therapeutically desirable. Therefore, results were judged on the basis of therapeutic result as well as an increase in psychomotor activity. Results were graded as follows:

Maximum response.....	++
Moderate response	+
No response	0

Results are given in Table 2.

From table 2 it can be seen that while in 10(25%) of the patients there was an increase of activity, in only 6(15%) were the

results therapeutically desirable. Also, in a large percentage of the patients there was no response.

Table 2

	Activation			Therapeutic Result		
	++	+	0	++	+	0
Schizophrenia		6	19		2	23
Affective Disorders	1	2	8	2	1	8
Psychoneuroses	1				1	
Chronic Brain Syndromes			2			2
Mental Deficiency			1			1
Total	1	9	30	2	4	34

Side effects were noted in 30(75%) of the patients. In only one instance did the occurrence of side effects cause discontinuance of the drug. This was a case of dizziness and vertigo in which the patient was unable to stand or walk without falling. Side effects were varied and are tabulated below:

Effect	No. of Cases
Tremors	2
Blurred Vision	2
Dizziness	8
Drowsiness	1
Allergy	1
Constipation	4
Voiding Difficulty	1
Dry Mouth	1
Edema of Feet	10
Total	30 (75%)

There was no consistent response in terms of appetite and weight. Fifteen patients gained weight, 11 lost weight and 14 showed no change. There was no correlation between change in weight and therapeutic response.

* Marsilid was contributed by Hoffman-LaRoche Inc., Nutley, New Jersey

** Visiting Psychiatrist, Delaware State Hospital

CONCLUSION

This is a report of a series of 40 patients treated with Marsilid. This drug was used in order to bring about a reversal of retardation in some inactive and depressed patients. The results were not encouraging on two accounts: (1) The majority of patients failed to show the anticipated activation (2) Activation often failed to be

therapeutically useful. There also were many undesirable somatic reactions. Therefore, Marsilid appears to be of limited value in patients with psychotic syndromes characterized by lethargy, social withdrawal and psychomotor retardation.

Investigation of the effects of Marsilid in the treatment of acute affective disorders is now in progress.

CLINICAL TRIAL OF RITALIN* IN THE TREATMENT OF CHRONICALLY UNDERACTIVE AND DEPRESSED PATIENTS

H. A. DENZEL, M.D.**

Since the advent of "tranquillizers," the use of drug therapy has received an impetus in psychiatry. Progress has been made in the treatment of disturbed patients who show hypermotility, increased affective tension and hypernormal initiative.¹ Patients in states of depression, apathy and underactivity, however, do not respond to these drugs. Although electroshock has given good results in the treatment of depression and allied syndromes over the last 20 years, it has remained a drastic treatment and many patients have objected to its use. On the other hand, drug therapy still leaves much to be desired. While the pressor amines of amphetamine and ephedrine are capable of stimulating mental activity, the cardiovascular and anorexic side effects limit their therapeutic value.

Ritalin was introduced by R. Meier F. Gross and J. Tripod as a central nervous system stimulant in 1954.² It produces small peripheral sympathomimetic qualities and exerts little or no effect on normal or moderately hypertensive blood pressure in fact, it produces a prompt reduction in blood pressure elevated by amphetamine or ephedrine.³ In average doses it rarely interferes with appetite. In animal experiments a dose of 0.5 to 1.5 mg. per Kg. induces motor restlessness which lasts for several hours, leaving the animal in a state of fatigue. Larger doses produce atactic gait and tonic-clonic convulsions.² Laboratory studies have shown antagonism of parenteral Ritalin to effects of reserpine, chlorpromazine, promazine and certain barbi-

turates. Clinical confirmation has been obtained through the successful treatment of barbiturate poisoning and such side effects of neuroleptic therapy as sleepiness, lethargy, nasal congestion, tremors and parkinsonism.⁴ Schneider and Holden⁵ administered this drug to monkeys with surgically induced parkinsonlike tremors and although the animals demonstrated typical psychomotor stimulation, the frequency and duration of pre-existing tremors were reduced for several hours. Ritalin apparently has a central stimulating effect on respiration, especially after the administration of morphine, which depresses the respiratory center.

SAMPLE

Ten patients, 9 female and one male were selected for this pilot study. They were from 22 to 74 years of age. Eight patients were diagnosed as schizophranic (4 catatonic, 2 paranoid, 1 simple, 1 hebephrenic) one as general paresis and one as psychoneurotic, depressive reaction. Duration of illness varied from 5 month to 27 years, with an average of 15 years. Clinically, the patients were characterized by underactivity, lack of energy and seclusiveness associated with depression or indifference. These were the target symptoms to be modified by the action of Ritalin.

METHOD

The patients were treated on the ward in which they lived. Specially designed observational records were kept by the ward physician and nurse. Special emphasis was given to recording evidences of activating

* Ritalin was contributed by Ciba Pharmaceutical Products Inc., Summit, New Jersey.

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effects on the basis of motor activities and social behavior.

All patients were examined daily by the ward physician. Somatic reactions were carefully recorded. To assure regular intake, Ritalin was given intramuscularly. No irritation at the site of injection was noted. Starting with 10 mg. morning and noon, the dosage was increased by 10 mg. according to individual response. The maximal dose employed in this study was 60 mg. twice daily. The original schedule was maintained, although it was observed that in some patients activating effect lasted only for approximately one hour.

The author also has administered Ritalin intravenously to a limited number of patients in order to familiarize himself with the effect of this drug. As reported by others^{6, 4} Ritalin can be given safely this way, and no adverse effects on circulation or at the site of injection were found. This method is especially useful if an immediate effect is desired, since response to the injection usually can be observed within minutes. If the response is not satisfactory, injection may be repeated to determine dosage requirements. Although this screening test was not routinely employed, it is believed that the described procedure has merit in eliminating patients in whom a poor response to this drug can be anticipated.

RESULTS

Of the 10 patients treated over a period of 21 to 41 days (average 26 days) five showed definite signs of central stimulation, but only one patient showed concurrent improvement. This patient was diagnosed psychoneurosis with depression. He started to improve three days after the initiation of therapy, and at the end of one month he had gained seven pounds and the depression had disappeared. The other four patients, who presented signs of activation without improvement in their behavior, were all chronic schizophrenics. They manifested aggravation of their psychopathology and began to show hostility and aggression. One patient, in whom the depressive mood and ideation was pronounced, showed marked

facilitation of thought. Formerly she was retarded, reticent and monosyllabic but under treatment she poured out her feelings, thoughts and beliefs. The depressive mood and ideation, however, remained unaffected. This increase in association and verbalization can be seen especially after intravenous injection and is similar to what may be observed after intravenous Methedrine.

A euphorizing effect, as often seen with Amphetamines or Iproniazid, was not evident in our limited experience. Ritalin in parenteral solution seems to be a rapid acting drug with an effect lasting for approximately one to four hours. Nine out of 10 patients lost from 1 to 21 pounds (an average of 8 pounds) during the course of therapy. There appears to be some anorexic effect similar to the action of Amphetamines with higher doses of Ritalin. Aside from this, side effects were mild and consisted mostly of tremors and dizziness.

The action of Ritalin on blood pressure is variable. In five patients of our series the blood pressure remained unchanged. Three patients experienced a rise of 10 and 20 mm. and in two patients the systolic blood pressure was increased 20 to 30 mm. When Ritalin was administered intravenously to normotensive patients, no significant blood pressure change was noted, but in one patient whose blood pressure was 200/90 before intravenous injection of 60 mg. Ritalin, the blood pressure dropped to 130/70 within 15 minutes while the patient showed signs of central stimulation.

COMMENTS

Ritalin is a rapid and short acting central nervous system stimulant which can safely be administered by intramuscular and intravenous route. Dosage must be individualized. In our experience it ranged from 10 to 60 mg. Ritalin was administered intramuscularly to 10 chronically underactive and depressed patients ranging in age from 22 to 74 years. Five patients responded to the drug with signs of central stimulation but only one showed clinical improvement. Nine out of ten patients lost weight during the course of therapy. Other side effects were mild and consisted of dizziness and tremors. A screening with intravenous Rita-

lin is suggested before initiation of therapy in order to eliminate those patients in whom a poor response to the drug can be anticipated.

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ABNORMAL EEG FINDINGS IN FUNCTIONAL PSYCHOSES

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The purpose of this paper is to report abnormal electroencephalograms found in a group of 31 patients with diagnoses of functional psychoses (schizophrenic, manic depressive and involutional psychotic reactions). From the total number of patients with functional psychoses showing abnormal EEGs, the following categories were excluded because of probable influence on recorded patterns: (1) Concomitant brain disorders. (2) Patients undergoing somatic therapies. (3) Patients with histories of psycho-surgical treatment.

It is the opinion of many authors that abnormal electroencephalograms are found more frequently in patients with functional psychoses than in a non-psychotic population. Kennard and Levy^{1, 2} report 60% abnormal findings in a group of 100 schizophrenic patients and 30% to 50% of abnormal findings in another study. Hurst and others³ found in EEGs of depressed patients a tendency towards slow rhythm and frequent occurrence of fast alpha rhythm in manic patients. From 117 manic depressive psychoses 24% showed abnormal EEGs and 21% were found to have borderline EEGs.

Chamberlein and Gordon-Russell⁴ studied a group of 45 schizophrenic patients and

found 45% abnormal tracings. Others⁵ reported the frequent occurrence of instability, dysrhythmia and beta activity as well as slowing of the EEGs of patients with functional psychoses.

All EEGs of this study were interpreted by the same electroencephalographer. Tracings were performed with an 8 channel GRASS EEG machine. The technique used was a combination of monopolar, bipolar and phasereversal electrode placement methods. Records were done when patients were awake and asleep. Hyperventilation for three minutes was invariably used. Tracings were divided to the following subtypes: (1) Normal tracing. (2) Slow activity. (3) Fast activity. (4) Generalized paroxysmal cerebral dysrhythmia. (5) Poorly developed pattern.

SAMPLE:

The 31 patients were admitted to the Delaware State Hospital from 1954 to 1957. Table I gives diagnostic classification, range of age, average and sex. There were twice as many females as males. The ages ranged from 16 to 76 years, with an average of 42.3 years. Only 3 patients were older than 60 years. They showed clinically no signs of cerebral arteriosclerosis or senility.

TABLE I
TYPE OF DISORDER, SEX AND AGE

Psychiatric Disorder	No of Cases	Sex		Average Age	Age Range
		F	M		
Schizophrenic Psychosis	18	12	6	33.5	16 - 50
Affective Psychosis	9	7	2	55	25 - 76
Involutional Psychosis	4	1	3	55.5	53 - 58
TOTAL	31	20	11	42.3	16 - 76

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TABLE II
EEG DATA

Psychiatric Disorder

	No. of Cases	No. of EEGs	Simple EEGs	Multi-ple EEGs	Concordant EEGs	Discordant EEGs	Slow	Findings			
								EEG Fast	Poorly developed	de-GP CD*	Nor
Schizophrenic Psychosis	18	35	7	28	26	9	15	3	1	13	2
Affective Psychosis	9	14	6	8	6	8	7	—	1	3	3
Involuntional Psychosis	4	5	3	2	5	—	3	—	—	2	—
TOTAL	31	54	16	38	37	17	25	3	2	18	5

* generalized paroxysmal cerebral dysrhythmia

Table II correlates the abnormal EEG patterns with type of psychosis. It tells how many patients had single and multiple EEGs performed, lists how many of the multiple tracings were concordant (the multiple EEGs of the same patient showing conformity of their pattern) or discordant (if there was no uniformity of findings). From the 54 EEGs of these 31 patients 49 were found abnormal. More than 50% of those abnormals showed slow activity and nearly 40% generalized paroxysmal cerebral dysrhythmia. None of the 10 patients with the latter findings gave clinically evidence of epilepsy or organic brain disease.

CONCLUSION

The fact that patients with so-called functional psychoses have abnormal EEGs

brings up the question whether their mental disorders are symptoms of an actual brain disorder or whether the abnormal EEGs are only secondary and concomitant findings. These findings are not only of theoretical but also of clinical interest, since they have a direct bearing on therapy.

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THE UNMASKING OF A FUNCTIONAL PSYCHOSIS AS AN ORGANIC BRAIN SYNDROME

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It is important to bring up those cases in neuropsychiatry which challenge diagnostic accuracy. The "borderline" between organic illness of the brain (in the medical sense of "morbid") and those called "functional" will give inspiration and advice to anyone engaged, without preconception, in the treatment and diagnosis of mental patients.

An "organic" change in the brain brings sooner or later a clear picture of mental signs, easy to diagnose in most cases. Nevertheless, we find again and again that long, insidious onsets of many years in some of the cortical atrophies or arterio-arteriosclerosis are not rare.

Perhaps sometimes diagnosis is impossible because the lack of clear-cut signs or symptoms complicates it. At other times, because we do not think of the possibility of such a marked process, we find that we are facing vague, fluctuating, diffuse psychopathology. Nevertheless, these cases are important from the scientific point of view as well as from the standpoint of treatment, care, assistance and outlook.

A CASE REPORT

A male patient was born in 1904. He was the first child in a family of three of which the last child died at the age of 21. The other one is in good health. Both parents were described as "nervous" and incompatible and childhood was marked by continuous arguments and feuding.

Social and financial status was high. The patient obtained a university degree and later took charge of his father's business. He was married at 24 years of age. He

was never sociable or friendly and at the age of 28 or 29 he developed an irritable attitude and explosive behavior. He was always meticulous, perfectionistic and almost obsessive.

About 1942 he was referred to a psychiatrist because of overt anxiety. Four years later he began psychoanalytic treatment, which lasted for more than two years. Nevertheless his mental status became steadily worse and mood reactions appeared often. He was admitted to a private clinic, where a course of electroshock treatment was given. Following discharge, he seemed improved but soon regressed gradually, presenting depressive moods often.

In 1952, he was admitted to the Pennsylvania Hospital. He was described as being constantly preoccupied, excited, incoherent at times, perseverating, profane, boisterous, explosive, tense, making noises and crawling on the floor. He was forgetful, confused, untidy, aggressive, etc. Neurological examination showed hyperactive reflexes, left Hoffman's sign and expressive aphasia for some words. EEG was normal but some subcortical changes were suspected. Later, he was described as having some memory loss, poor general grasp, poor attention and concentration, and symbolization, judgment and reasoning were impaired. Psychological tests were interpreted in the form of a schizophrenic process, although an organic involvement was not ruled out. X-rays and other examinations showed findings within normal limits.

He was discharged and diagnosed as "Schizophrenic Reaction, Undifferentiated Type," and as a second possibility, a "Chronic Brain Syndrome of unknown etiology."

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On admission to this hospital on December 10, 1952, he was diagnosed as "Involutional Psychosis." He received seven electro convulsive treatments, with some improvement, and was discharged after four months of hospitalization. Seven months later he was readmitted and the former diagnosis of involutional psychosis was maintained although schizophrenic reaction was suspected. There were psychomotor agitation, mild paranoid ideation, incoherence in speech, untidiness, insomnia, incomprehensible speech, lack of judgment, disorganized thought, rumination, perseveration, lack of concentration and attention, etc.

In March 1954, a course of Chlorpromazine was started. He received 800 mgs. daily. No noticeable change was observed. One month later, a transorbital leucotomy was performed. He recovered and improved. He went home on weekends. In August the Chlorpromazine was discontinued without any improvement. Reserpine also was used without success. He regressed more and more, and the weekends were discontinued.

In March 1955 evident perservation and odd, unexpected, jerky movements were noticed. Later, he began to walk with very short steps. A neurological consultation in June established that: "The patient appears to have a frontal lobe syndrome." The neurologist thought that no basal ganglion was involved. Throughout 1955 he remained agitated and restless, receiving either Reserpine or Chlorpromazine.

In February 1956 another neurological consultation was requested. The neurologist's impression was that no organic brain damage was present. His behavior and mental status were still the same. In May another neurological consultation showed slight evidence of a focal right cerebral lesion involving both the cortex and subcortical structures. The pneumencephalogram showed considerable cortical atrophy involving both frontal lobes and sylvian fissures, with bilateral dilatation of the lateral ventricles. In September he had several seizures and was given Dilantin. The jerky and purposeless movements were increasing constantly. They were chorei-

form in character, incapacitating the patient to walk without help.

On July 26, 1954, April 10, 1955 and February 14, 1956, repeated EEGs were normal. Laboratory findings were within normal limits. Spinal fluid taps, which were repeated, always showed normal findings.

In June 1958 the neuropsychiatric status of the patient was characterized by a gross impairment of intellectual capacities, loss of memory and judgment, disorientation in time and place, lack of concentration and untidiness.

Neurologically, we found gross choreic-athetotic movements, forced grasping, Wartenberg's reflex, Hooking (Kleist's sign), ataxia with body movements, adiadochokinesia and hypoactive tendon reflexes. These findings confirmed the existence of a cortical atrophy of the frontal lobe, with involvement of basal nuclei and frontopontocerebellum pathways.

COMMENTS

The patient received various kinds of treatment including psychoanalysis, electro convulsive therapy, drug therapy and T.O.L., to which he responded with only temporary improvement. It is worthwhile to remark that the onset of organic mental illness can be characterized by psychic symptoms only. Quoting Feuchtwanger: "The first symptoms noticeable in a syndrome of the frontal lobe are impairment of judgment (impulsivity), moria, and in a less degree, disturbance of equilibrium. In the second place and later (generally) appears the somatic components as disturbance of the movements, sensibility, sensorium, speech, memory and ideation."

Other authors define the following symptoms for consideration of frontal lobe syndromes: (1) disturbance of mood and temperament, (2) disturbance of psychomotor activity and (3) intellectual disturbances.

The reported case demonstrates the difficulties of division between functional and organic diseases. This stresses the necessity of caution in diagnosis and therapy without exhaustive and repeated physical examinations.

UNDERSTANDING A CHILD'S NEEDS

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Approximately fifty per cent of all referrals made to the State of Delaware Mental Hygiene Clinic pertain to children and their problems. The desire for better guidance and help with the problem of understanding the needs of children is expressed constantly. If we can comprehend what is required to provide a proper atmosphere conducive to good mental hygiene practices in child care, management and development, perhaps we will be able to solve more of the problems that come to the attention of mental hygiene clinics.

The day of the "seen but not heard" philosophy of child rearing has almost disappeared. What has taken its place? Has the change resulted in better understanding and managing of our children? The child becomes our chief concern. It is about him that we ask: Why does he act the way he does? Why is he different from the boy next door? How can we help him to behave differently from what he does now?

Before we can begin to answer these and many more questions we should first try to investigate what goes into making the child who and what he is. A child lives, behaves and grows—but so does an onion. Unlike an onion or any subhuman organism, a child "senses," i.e., he feels, hears, sees, has emotions and thinks. To describe a child is to describe almost all of human nature. A child also is a social being and is subject to all of the factors in his social and physical environment for development. A child has needs, and these needs must be met in order to insure his proper development and maturation.

One has only to look casually at the practices of child rearing in countries other than our own to contrast the various concepts of and attitudes towards a child's

nature. We can begin to see how the practices of child rearing are related intimately to religious, ethical and cultural ideas, economic circumstances, social strata, political doctrines, and in fact, an almost unending series of ideas, goals and purposes, for the most part far removed from the child himself. One might speculate that most of the traditional methods of child rearing stem from sources that have little relevance to the immediate needs of the child. It has been stated that civilized man has survived despite, not because of, the methods of child care!

Before one attempts an investigation of the problem of child needs he first should look into his own personal biases, beliefs and prejudices to appreciate how these color his feelings and values. How many parents have conceptualized the role of their child before he has made his entrance into the world? At birth a child may enter a family which is benign or hostile simply because of the accidental choice of it sex. Parents who readily tend to the physical requirements of the child may be hostile to it because of the sex and may seriously hamper the child's need for love, security and affection which are as vital as the need for physical care. Concomitant with this need is the requirement that the child be accepted as a unique individual who should be protected from the untoward feelings and biases of adverse parental influences.

A child has needs for nutrition, sleep and activity. However, he has to develop at his own rate of growth and cannot be held to a rigid schedule based on what the child next door is accomplishing. This applies to the child's eating habits, need for rest, weaning or bowel-training.

A child frequently is disturbed by emotional promptings such as anger, rage and grief, which search for some outlet or re-

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lease in overt behavior. Frustration of this release can impel the child to react blindly, cruelly and destructively toward objects or individuals and even himself. It is hard for adults to comprehend the inner feelings thus aroused in a child and they in turn may react toward him with force and restraint. This may hamper the emotional maturation of the child. Although the adult may temporarily gain control of the child, the child loses the opportunity to learn how to control his own emotions. Failure of the child to regulate and pattern his emotional feelings and expressions in order to be freed of their urgency will only increase the child's resentment and serve to keep him at an infantile emotional level.

There is also a vital need for socialization. The long period of care and protection required to make a child self-sufficient and mature demands that he become a social being. It is interesting to note how isolation from the group, be it family or society, is often used as a severe form of punishment. This is accomplished by exile from one's country or witnessed in the words of the irate parent to a child: "March straight to your room and stay there until we call you." Because of man's unique nature—his intelligence, flexibility and socialization—he has produced complex cultures and civilizations. Any given society with its accompanying cultural standards can require a minimum or maximum productivity from its members. If the society fosters more development of the potentials of its members, the individual can make further contributions to a better social world.

As a member of a social group, a child has the task of learning how to get along with its members. He must respect those in authority and learn how to control his

conduct in keeping with the group's customs. This means that he must suppress many of his desires and accept temporary frustration for anticipated rewards. The child must familiarize himself with the mores of his group. However, if authority is experienced first by the child in the form of severe, coercive paternal figures, successful socialization will be thwarted. Resentment towards authority will be directed towards all authority figures. Here, then, is another great need for the child; that of accepting those in authority without developing fear and conflict with them.

From experiences with parents, siblings, teachers, ministers and others in his social world, the child develops a vital need to create an ideal of himself and the kind of person he would like to be. This image will include his experiences, emotions and feelings. They may be constructive promptings toward positive achievement, or may take the form of negative or destructive urges which are seen in delinquent behavior and in cases of mental disorder.

To the child the world around him is large and perplexing. He meets daily situations about which he feels inadequate. Faced constantly with the problem of adaptation to his environment, the child has a pressing need for the security of stable relationships both with his physical surroundings and human relationships. The maintenance of this security demands unending patience, understanding and tolerance on the part of those responsible for the child's development.

These are only a few of the needs of a good mental hygiene approach to child rearing. It is to be hoped that with intelligent, responsible planning by parents, many of the problems of children seen in mental hygiene clinics may be eliminated.

SOME OBSERVATIONS ON THE USE OF VISUAL-MOTOR GESTALT TECHNIQUE IN GROUP TESTING OF PERSONNEL

JOHN T. DRURY, M.A.*

One of the basic problems in the operation of mental health facilities is the selection and evaluation of personnel. Even in the employment of attendants from a very limited labor pool, it is important to eliminate the unfit and to obtain the best possible service from those who are to serve in this important capacity. For the attendant spends more time with the patient than anyone else on the hospital staff and he can be the most important factor in the patient's quick return to a useful and satisfying role in society. Through the years the Delaware State Hospital has made an effort to test every attendant employed in its facilities.

However, testing large numbers of people who are likely to be familiar with psychological testing presents special problems. Large numbers necessitate group testing, and group tests are seldom as good as individual tests. In this setting, too, the inventory type of test, with many obvious questions, does not give the kind of information desired. Hence there is a clear need for brief tests, easily scored and interpreted, that are well-disguised and practically impossible for the subject to distort or structure. But the instruments used must yield sufficient information to make the procedure worthwhile. It therefore becomes necessary to use tests that are well-established and have a sufficient body of literature and research results to give the tester confidence in results and interpretations. One way of attacking this problem is to adapt widely-accepted and well-validated individual tests to the group-testing situation.

An instrument that takes only a few minutes to administer and frequently yields important findings as to organic functioning, intelligence, and personality problems is the Bender-Gestalt Visual-Motor Test. This test has a long history, going back to experimental work done by Max Wertheimer and others. The assumption of the Gestalt psychologists was that we tend to perceive whole images rather than a conglomeration of parts, and that we tend to organize these "wholes" according to principles of proximity, similarity, direction and inclusiveness. But Lauretta Bender pointed out that this was a static concept and that it failed to take into account the drives and tendencies of human conduct, growth, retardation and development. Paul Schilder emphasized the idea that the organism reacts by a total process, with its total potential, to a total situation and adds something thereby to the experienced perception. Further experimentation has verified these concepts and tended to show that the perceiver completes Gestalts in a manner that is meaningful to him, to organize the perceptions according to sensory-motor patterns that are consistent with the developmental level, and to distort the configurations in a manner expected with certain pathological states organically or functionally determined.

This experiment was designed to evaluate the results of an adaptation of the visual-motor Gestalt technique to the group procedures. It was necessary to find out whether or not the stimuli were handled in the same way, if the same kind of distortions were obtained, if the test could discriminate between good attendants and poor ones, and if the results of this test

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were consistent with, yet added to, the information obtained from other tests in our battery (The Revised Beta Intelligence Tests, the Delaware Sentence Completion Test, the House-Tree-Person Test and the Projective Questions).

The designs used by Bender and others were enlarged and placed on cards 14" x 22" (approximately 12 times the original size) and were then shown to the subjects (each of the nine cards for about 30 seconds) at a distance that roughly varied from five to twenty feet. The applicants were asked to reproduce the nine drawings on a regulation 8½" x 11" sheet of paper as accurately as they could without using any aids other than the pencil. Full and free cooperation was always obtained, since this test is very easy to perform and is non-threatening even to anxious individuals. Other members of the staff used the test and varied the technique in the manner of Hutt by giving the subjects several sheets of paper, etc. Only those tests that were done in accordance with the foregoing instructions were used in this study.

Qualitatively the results were in accord with those obtained from general populations tested in the hospital and in the outpatient clinics. A greater variation in size of the figures was observed, as might be expected, since the patterns were unfamiliar to the subjects and the distance between the subject and the stimuli varied greatly. However, the same kind of primitivization (substituting responses of an earlier developmental level), rotation (turning the designs upside down, or sideways), fragmentation (reproducing only part of the design), etc., was demonstrated by disturbed persons on this test as is obtained on the individual testing. The same evidences of organicity were elicited by this method and the same degree of correlation was observed with intelligence tests. The latter is not too good, since there are obviously other factors than intelligence at work in this test, but it is in the expected direction.

An attempt was made to quantify the results, using Pascal and Suttell's method of scoring the visual-motor Gestalt test for

various deviations. The obtained scores showed a range from 21 to 171, with a mean of 63.5, the higher scores reflecting greater deviation from the stimuli and hence greater disturbance or dysfunctioning. These scores were compared with the intelligence quotients and the ratings of the Nursing Division as to the person's stability and work record.

The sample is small and a statistical approach would be meaningless, so the results will be reported factually and numerically.

The mean was used as a dividing or cut-off point and two groups were obtained: those with scores on the "Bender" above 64 and those with scores below 63. The former group contained 16 persons, of whom 9 were rated unstable and 7 were rated stable. The low score group contained 17 persons, of whom 11 were rated stable and 6 unstable. These results are in the expected direction and tend to verify the impression that unstable or disturbed people do poorly on this test and obtain a score showing more deviation from the stimuli.

A check was made against the obtained intelligence quotients on the Beta, and the normal (average group—from I.Q. 90 to 109) was eliminated as fairly balanced. Of those who obtained an I.Q. below 90, 3 showed scores on the Bender lower than 63 and 5 showed scores higher than 64. Of the 8 persons in the study who showed an I.Q. higher than 110, 6 scored below 63 on the Bender and 2 scored above 64. Again, these results are in the expected direction and show that intelligence is a large factor in this test. It also shows that these tests provide some measure of checking against one another and further verifies our impression that there is some pathology present when there is a large discrepancy between the person's performance on the Beta and on the Bender.

Further study tends to show that bright people (I.Q. above 110) do not usually continue employment in this capacity. This probably is so because they return to school or obtain better positions. Whereas the study shows that those of dull-normal intelligence do continue in this employment

(a ratio of 6 to 2) and 4 of these are rated as good workers and stable.

It is possible that this study was somewhat defeated by its own efficiency since reports which were sent to the Nursing Division at the time of this initial group examinations may have facilitated better placement and adjustment of the worker to the job. However, this is the purpose of testing and no one would have it otherwise.

It is the conclusion of this experimenter that this adaptation of the visual-motor Gestalt technique is a fruitful addition to our test battery and repays the brief time spent in administration. However, it is obvious that the test cannot be used alone and should not be used to arbitrarily elim-

inate candidates. It can serve the purpose of obtaining a better placement for a candidate who shows signs of visual-motor limitations where he will feel more adequate and do a better job. It can, together with the other tests, pick out the highly skilled or very bright candidate and help the department place this type of candidate in a challenging and satisfying position, where he will be more likely to remain. It also can help to pick out the unstable or emotionally disturbed candidate in order that he may be closely supervised and assisted with his own problems. All of these placements will make for the most advantageous use of all help available and a more efficient functioning of the whole institution.

THE RELATIONSHIP BETWEEN PSYCHOMETRIC FINDINGS AND BEHAVIORAL PATTERNS; A CASE STUDY

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The Wechsler Intelligence Scale for Children and the intermediate form Wechsler Bellevue Scale II have received increased and equal acceptance for evaluating the general intelligence level of children and adolescents. These scales offer excellent opportunities for retest purposes to assess the development of individuals who have been previously examined.

The most obviously useful feature of these scales is the division into verbal and performance batteries. The *a priori* value of this plan makes possible the comparison between abilities such as verbal facility, reasoning, manipulation of objects and perception of visual patterns. Of equal importance to the clinical psychologist is the diagnostic significance of the discrepancy between verbal and performance subtest scores. The variation between verbal and performance scales are frequently associated with some type of mental pathology. The larger the discrepancy, the greater the probability of pathology. It has been noted that, in general, most mental disorders show greater impairment of functioning in the performance than in the verbal spheres. This holds true for every type of impairment along the continuum of psychoneurotic to psychotic disorders. Large discrepancies between verbal and performance scores in favor of performance have been observed in those cases described as adolescent psychopaths and mental defective individuals. However, in general the clinician usually follows a rule of thumb that a variation of eight to ten points (the intelligence or I.Q. not far from average) between the two scales in either direction falls within normal limits. It has been noted that children of superior intelligence generally

do better on the verbal than the performance part of the examination.

In general, individuals who are overtly aggressive or commit crimes on the basis of neurotic conflicts are viewed as having a psychopathic character disorder. Shafer lists the prime characteristic features as weak integrative ability and underlying primitiveness of thinking, blandness, ostentatious overcompliance covering a basic callousness and inability to empathize with others, impulsiveness, fabulizing and preoccupation with anti-social behavior. The characteristic pattern obtained on the Wechsler Intelligence Tests is a superiority of performance over the verbal level.

Jastak has observed that children with good intelligence who show inferior achievement in most subjects usually manifest maladjustment of a social nature, i.e. truancy, stealing and sex offense.

In the general population seen at the Mental Hygiene Clinic, children of school age constitute a large proportion of the patients. These children, showing a variety of behavioral problems and symptoms, frequently have had previous psychological evaluation. This prior testing serves as a valuable aid in comparing patterns obtained over a period of time.

The purpose of this case report is to describe the behavioral disorder of a child in various stages of development; to compare psychometric findings; to show how the nature of his disorders show a marked similarity with his life situation as to suggest psychogenic etiology and to illustrate the tenability that mental maladjustment follows along a continuum.

The report concerns a 15-year-old boy who originally was referred to the clinic at

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the age of nine on charges of breaking and entering and behavioral difficulties. Years later he was referred again for breaking and entering and larceny. His latest referral includes the above reasons and severe emotional problems.

BRIEF PERSONAL HISTORY

The patient is the older of two children. The case history includes little information regarding the patient's younger sister. The physical history of the patient indicates that birth was normal, although lack of prenatal care and undernourished condition of the mother are reported to have left him sick for the first two years of life. At four years of age he had a "nervous breakdown," had nightmares and could not sleep well.

During this period of the patient's life the parents were having marital difficulty. The mother stated that the patient witnessed many scenes between the parents and "feels that they had an effect upon him." The mother is described as an attractive woman, highly ambivalent with hysterical and compulsive tendencies. Her understanding of the patient is essentially an intellectual one. The patient's father was an aggressive alcoholic and unstable individual who often stated that his son would end up in a reform school. The parents separated early in the marriage (when the patient was approximately eight years of age, the divorce became final). The mother remarried when the patient was eleven years old in an attempt to stabilize her home life.

The patient had difficulty with teachers in school but his work was reported to be good. He is said to have been an insatiable reader, resourceful and creative in school work. He was affectionate to his sister and is described as a likable boy who was easily led into trouble. Although he lacked an ego ideal he is reported to have developed a resourceful personality to some extent. In other reports the patient is said to have remained a nervous child who cried frequently. At the age of eleven he was reported to have suffered "blackout spells." He experienced what was called an unnatural sex act around the age of thirteen and on another occasion was stuck for

sometime in mud up to his waist before he was removed.

TEST FINDINGS AND DISCUSSIONS

The patient was examined between the ages of seven and nine years. At that time, he was described as passive and dependent in his relationship to the examiner. The WISC, which elicited selective and variable effort from the patient yielded a full scale I.Q. of 112, with a verbal of 106 and a performance I.Q. of 117. The discrepancy between verbal and performance scores is considerable as is the range of subtest scatter. The patient achieved a minimum weighted score of eight and a maximum weighted score of fourteen. The personality pattern analysis indicated that the patient had superior capacity, but his pattern of development was uneven and indicative of his maladjustment. Tests of perception, manual manipulation and planning, which refer to alertness of the organism, were superior for his age. On the other hand, tests related to interpersonal contact like verbal reasoning, judgment and ability to communicate were average. Alertness to detail, the hallmark of psychopathic adolescents, rated high. His acting out episodes were viewed as determined by mechanisms of compensation, hostility and rationalization. The tendency to identify with a female figure blended into his feeling of inadequacy and were complicated by attempts to manipulate his mother figure.

Following this examination the patient received individual therapy for approximately two years. During this time he is alleged to have remained out of trouble. Approximately two years after termination of therapy the patient again had difficulty which resulted in placement at an institution for emotionally disturbed children. He was treated by a child psychiatrist for 56 weekly sessions and relased on a trial visit with the following note: "It is my impression that the patient's super-ego has become gradually, in the process of therapy, much better integrated but still occasionally he has expression in which he shows weakness. . . ."

Five months after discharge from the institution the patient was committed to

an institution for delinquent boys as the result of breaking and entering and larceny.

On the psychological examination five years later (age 14-11) using the Wechsler-Bellevue Scale Form II, a less select and variable pattern was elicited. The patient achieved a full scale I.Q. of 126, verbal 129 and performance I.Q. of 115. The discrepancy between the two scales was still wide but in a different direction. The patient now achieved a verbal score which is 14 points higher than the performance score. The range of subtest scores was from 6 to 16. The subtest patterns remained fairly constant, with one notable exception; alertness to detail was now only slightly above average, being replaced by tests related to manual manipulation and synthetic ability. The Wide Range Achievement Test indicated that the patient was capable of reading on the tenth grade level but arithmetical ability was only at the sixth grade level. This pattern frequently is associated with maladjustment of a personal nature.

The most striking difference noted in comparing the findings of the two psychometric examinations was the reversal of verbal and performance scores. The patient functioned on a higher intellectual level than that previously obtained but the reversal of patterns seems to indicate that he has, to some extent, begun to internalize his conflicts and to adopt new modes of behavior. This appears to be a tenable hypothesis in view of the fact that the patient has written several suicide notes and has been unable to face up to more aggressive boys in his cottage at the institution. Since being placed in a cottage with older boys and given unobtrusive protection and support by boys and staff, the patient has begun to show conformity and stability at the institution.

At the time of administration of the earlier psychometric, the patient was at the mercy of a disrupting environment and was unable to satisfactorily resolve any phases of his development. He was constantly subjected to an unstructured milieu, lack of ego ideal and mounting pressures. These factors undoubtedly contributed to the develop-

ment of an inadequate and weak ego and caused him to seek every opportunity for furtive outlets against those who could not retaliate. Weak integrative ability and underlying primitiveness of moral values, which have not progressed beyond the infantile stage of control, a basic callousness to punishment, and impulsiveness were prominent factors in the pattern of development.

Subsequent psychotherapy and institutionalization provided structure and aided in the development of some ego strength. Presently his manner of allaying anxiety and guilt are by disassociation and flight into passivity. The masochistic pattern that developed out of his matrix of growth and development are expressed in his attempt to identify with his father as a reprehensible, guilty and punishable individual. The pattern that seems to be unfolding is a somewhat bland emotionality, covert hostility, guardedness and tendency towards disassociation. These are the danger signals noted in the development of the patient's severe character disorder. Intellectual abilities are superior with widely uneven development of function. Synthetic, manipulative and verbal facilities are well developed but contrast with weak development in areas pertaining to social adjustment, such as judgment, attention and reasoning functions. He is less alert to detail than previously, showing some tendency to restrict areas of awareness perhaps as a means of self-protection against a hostile and intolerant environment. On the other hand, this lack of alertness may be the result of changing behavioral patterns.

It seems reasonable to assume that psychogenic factors, institutionalization and psychotherapy have played important roles in his personality structure. It is apparent that some change in the personality structure has taken place, as noted in the psychological examinations. The principle that pathology follows a continuum seems well illustrated by the findings evidenced in the patient's protocols.

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THE ROLE OF THE PSYCHIATRIC SOCIAL WORKER IN EFFECTUATING VOLUNTARY SELF-COMMITMENT OF A MENTALLY ILL PERSON TO A PSYCHIATRIC HOSPITAL

JOSEPH BERN, M.S.W.*

This paper was written to point up the psychiatric social worker's role (as well as possible approaches of other community workers) in guiding the mentally ill toward voluntary self-commitment.

The case I shall discuss was brought to the attention of the Mental Hygiene Clinic by Mrs. Y's family physician. He stated that Mrs. Y might be able to use the Mental Hygiene Clinic for out-patient treatment or that she might need to go to the psychiatric hospital. Mrs. Y complained to her physician of a fear of death, "strange feelings" and dizzy spells, and he had prescribed medication which was designed to have a quieting effect on her.

When she came to the Mental Hygiene Clinic for an interview she related that the medication was ineffectual and that in the last few days she had a greater dread of dying than before. She was afraid that her heart would stop, and she had choking sensations. She further stated that she felt so nervous at times that she told her husband that if she continued in this condition she "was going to kill herself." She also stated that her three-year-old son was getting into everything and upsetting her so greatly that she "felt like taking a knife and killing him." She complained that in the two days prior to coming to the clinic she could not sleep or eat and that she was afraid to eat anything offered her by her neighbors because she feared being poisoned. In the interview Mrs. Y and I came to the conclusion that she was ill and

wanted help, and we agreed to explore how this help could be given her.

The Clinical Director was contacted and the symptoms were discussed. He suggested that Mrs. Y be examined at the state psychiatric hospital with a view toward possible admission. Mrs. Y's family physician was contacted and we discussed the rapid deterioration which had taken place. I also discussed the Clinical Director's recommendation that an immediate psychiatric examination was indicated with a view toward possible hospitalization. Mrs. Y's family physician concurred with the recommendation of the Clinical Director. I asked him if he would talk to her about going to the hospital for examination and possible voluntary commitment, since I knew that she trusted his judgment. Mrs. Y, after talking with him, agreed to go for an examination.

I talked with Mrs. Y, her husband and her mother-in-law about what a possible voluntary commitment might entail and how it might be accomplished. Mrs. Y's mother-in-law assured her that she would take care of the child while Mrs. Y went for an examination, and should a voluntary commitment be necessary, she promised to take care of the child for an indefinite period. I contacted the State Hospital, gave a report and determined that bed space was available.

When the intake psychiatrist called me at the conclusion of his examination, he advised that he had suggested to Mrs. Y that she commit herself voluntarily to the

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state psychiatric hospital for treatment, and she did so.

CONCLUSIONS:

Each case in a Mental Hygiene Clinic involves a different individual and is handled differently by those connected with the case. I have tried to evolve from the experience of the Mental Hygiene Clinic some general statements which I think can be utilized by social workers and others who work with mentally ill persons in the community. They are as follows:

1. Help the mentally ill person recognize that he is ill and that he wants to get well.
2. Aid the mentally ill person in exploring his own stake in getting well and how he may be able to function more effectively when he is well. Help him to compare this hoped for state of well-being with how he functions when he is ill and help him to focus on how he may be affecting his family relationships, his work relationship and his community relationships.
3. Explain fully to the mentally ill person what facilities are available for his examination, diagnosis and treatment.
4. Show the mentally ill person that hospitalization on a voluntary commitment basis can be one of the suggestions which might grow out of an examination and can be one of the ways he can elect to help himself to better mental health. Discuss fully and completely what voluntary commitment involves.
5. Help the mentally ill person to obtain competent psychiatric examination and

treatment either by helping him make direct contact with the psychiatrist or psychiatric facility or by helping him and his family (where family involvement is possible and advisable) to contact the psychiatrist or psychiatric facility.

Needless to say, there are many people who are mentally ill but can not recognize that fact. Efforts toward voluntary commitment may prove fruitless with them. In these cases involuntary commitment may be the only way to provide treatment.

However, I believe that many mentally ill persons can be helped to take the first step toward voluntary self-commitment to a psychiatric hospital if community workers are taught that the mentally ill person often does have some awareness of his illness and may have a desire to get well.

Patience to talk and "get through" to the mentally ill person is the first essential ingredient, and understanding is the second vital component. Hospitalization of any kind has a frightening element of the "fear of the unknown" and may involve real pain and trauma. Development of this understanding should be a part of the community worker's training, to help relieve the fears which block acceptance of voluntary self-commitment.

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MEDICAL COURT CASES



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"INCORRECT DIAGNOSIS"

CHRISTIAN VS. WILMINGTON GENERAL HOSPITAL ASSOCIATION, INC.

Supreme Court of Delaware 135 A. 2d 727

This was an action against a hospital which employed an intern who allegedly failed to make a proper diagnosis. The Superior Court of New Castle County, Delaware, directed a verdict for the defendant hospital at the close of the plaintiff's testimony. The plaintiff brought writ of error to the Supreme Court of Delaware, which affirmed the decision of the lower court...

The plaintiff, who was 16 months of age at the time of the injury, while playing in her home, fell on a glass bottle which broke and severely cut her right hand. The plaintiff was taken by her parents to the Wilmington General Hospital and there treated by an intern then on duty in the emergency ward. At the time of treatment, the plaintiff was crying and struggling so that she had to be held by her parents and a student nurse then of duty.

The intern examined the wound, treated and sutured it. In response to a question by the child's father, the intern stated that the tendons of the hand were not severed. Several days later the plaintiff was again taken to the defendant hospital. She was again examined by the same intern, who noted that a stiffness had developed in the index finger of her right hand. At this time the intern did not diagnose the stiffness as having been caused by a severed tendon.

Subsequently the plaintiff was examined at the Philadelphia Naval Hospital and her parents advised that the tendon serving the index finger had been severed, and that an operation would eventually be required to repair it. As of the date of the trial of the case in the Superior Court of New Castle County, four years following the injury, the operation had not been performed.

The courts found that:

1. it was entirely possible in examining the plaintiff according to the accepted medical standard for the intern not to have ascertained at the time of such examination that a tendon had been severed,
2. the failure to ascertain immediately the severing of the tendon did not result from a failure to conform to the accepted medical standard, and
3. No permanent injury followed the failure to discover the condition.

The Supreme Court of Delaware declared: "It seems clear from the plaintiff's case that the intern at the defendant hospital examined the infant plaintiff as any other doctor in the community would have examined her under like circumstances. There is no evidence that his treatment of the wound and suturing failed in any respect to conform to the established standard for the medical profession."

BOOTH VS. UNITED STATES**United States Court of Claims 155 F. Supp. 235**

The plaintiff brought suit against the United States (acting through the medical personnel of the United States military government in Germany) for malpractice, alleging that her husband's death was caused by the failure of the Army medical personnel to use reasonable and proper skill and knowledge in diagnosing and treating her husband's condition, thereby breaching the legal contractual obligation which the Government had assumed toward Booth, her husband.

Army medical authorities and physicians in Germany incorrectly diagnosed Booth's condition as aerophagia instead of carcinoma. As a result of the wrong diagnosis, the cancer grew to such proportion that Booth died.

Lack of skill or care in diagnosis as well as in treatment is malpractice. Although a physician is liable for a failure to diagnose correctly if such failure is due to a lack of required skill or care, if he does use the proper degree of skill and care, he is not

liable for a mistake in diagnosis. While the Army medical personnel in Germany, in their medical care and treatment of Booth, had to exercise that degree of care and skill ordinarily exercised by the medical profession in similar cases, it did not have to exercise extraordinary skill and care or the highest degree of skill and care possible. So long as the requisite skill and care were used, a mistake in diagnosis would not constitute malpractice.

The United States Court of Claims found that the medical procedures followed by the Army medical authorities were the standard and accepted procedures for a case such as Booth's. The Court stated: "In view of Booth's long history of stomach trouble, the unchanging nature of his complaint, and the nature of cancer itself in its early stages, there was no reason to suspect the existence of cancer. . . The Army medical personnel, in view of the data reasonably available to them, did not fail to afford Booth the standard and accepted medical care and treatment."



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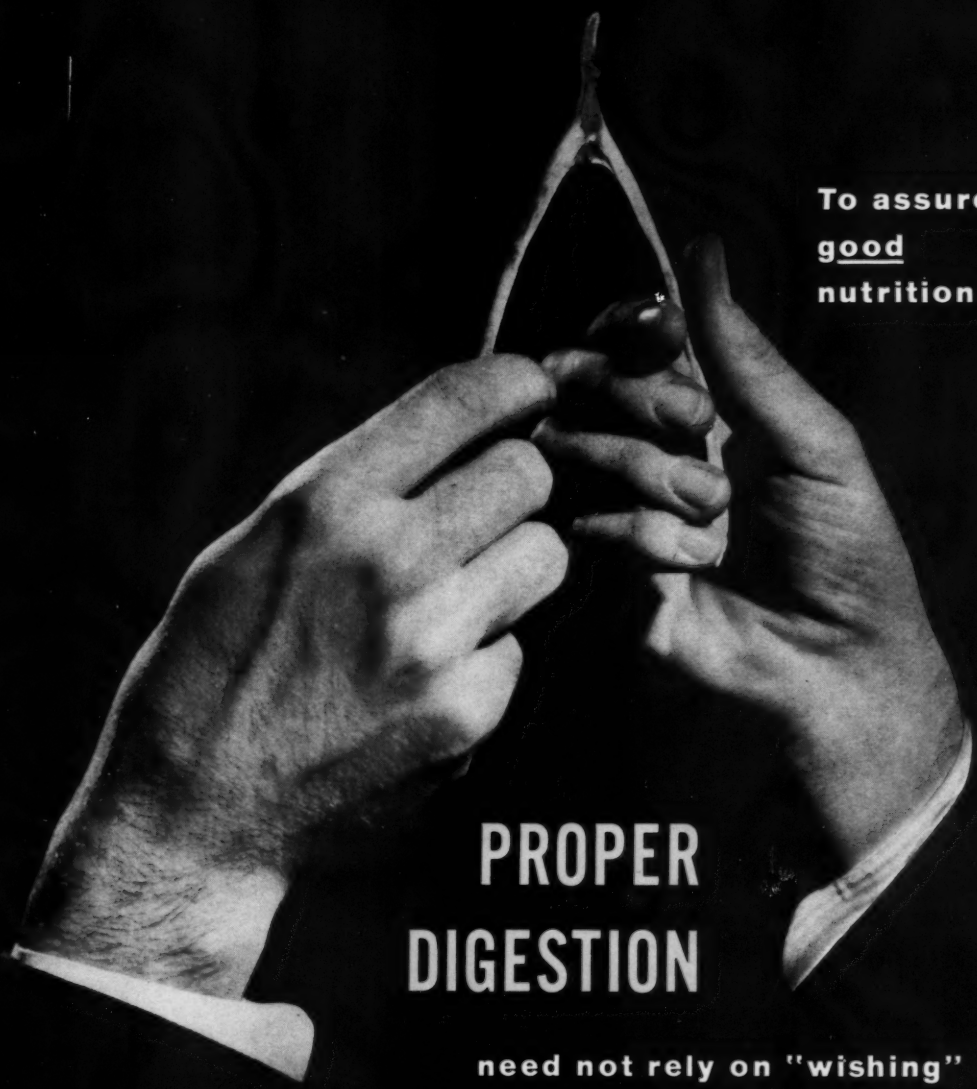
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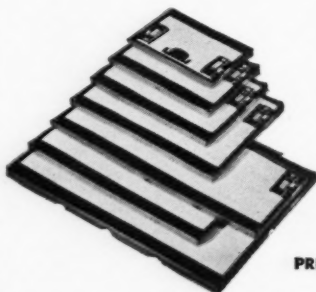
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MEPROLONE suppresses the inflammatory process and simultaneously relieves aching and stiffness caused by muscle spasm, to provide greater therapeutic benefits and a shorter rehabilitation period than any single antirheumatic-antiarthritic agent.

MEPROLONE-2 is indicated in cases of severe involvement, yet often leads to a reduction of steroid dosage because of its muscle-relaxant action. When involvement is only moderately severe or mild, MEPROLONE-1 may be indicated.

SUPPLIED: Multiple Compressed Tablets. In three formulas: MEPROLONE-2—2.0 mg. prednisolone, 200 mg. meprobamate and 200 mg. dried aluminum hydroxide gel (bottles of 100). MEPROLONE-1 supplies 1.0 mg. prednisolone in the same formula as MEPROLONE-2 (bottles of 100). MEPROLONE-5—5.0 mg. prednisolone, 400 mg. meprobamate and 200 mg. dried aluminum hydroxide gel (bottles of 30).

a

Because muscles move joints, both muscle spasm and joint inflammation must be considered in treating the rheumatic-arthritis patient . . .



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Rheumatoid Arthritis

multiple compressed tablets

MEPROLONE[®]

THE FIRST MEPROBAMATE-PREDNISOLONE THERAPY



b

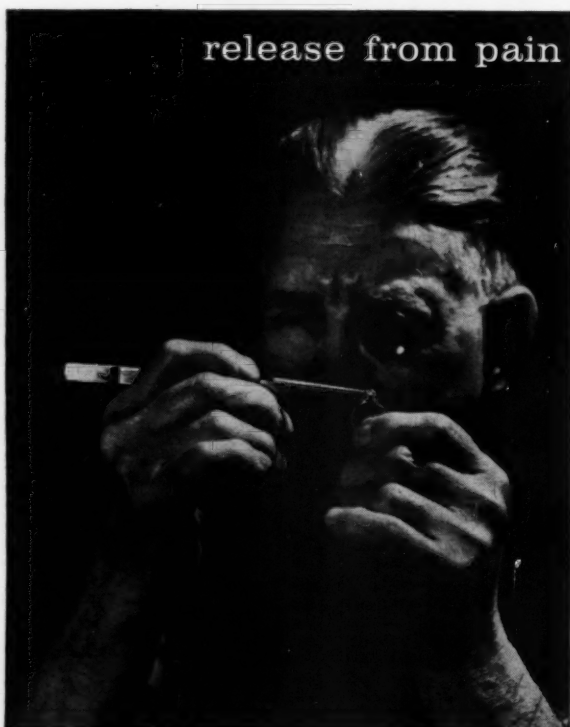
MEPROLONE is the one antirheumatic-antiarthritic that exerts a simultaneous action to relax muscles in spasm and to suppress joint inflammation...

c

Therefore, MEPROLONE does more than any single agent to help the physician shorten the time between disability and employability.



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Reference: 1. J.A.M.A. 158:386 (June 4) 1955.

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Ford, R.V., and Moyer, J.H.: Rauwolfia Toxicity in the Treatment of Hypertension: Some Observations on Comparative Toxicity of Reserpine, a Single Alkaloid, and Alseroxylon, a Compound Containing Multiple Alkaloids, *Postgrad. Med.*, January, 1958.



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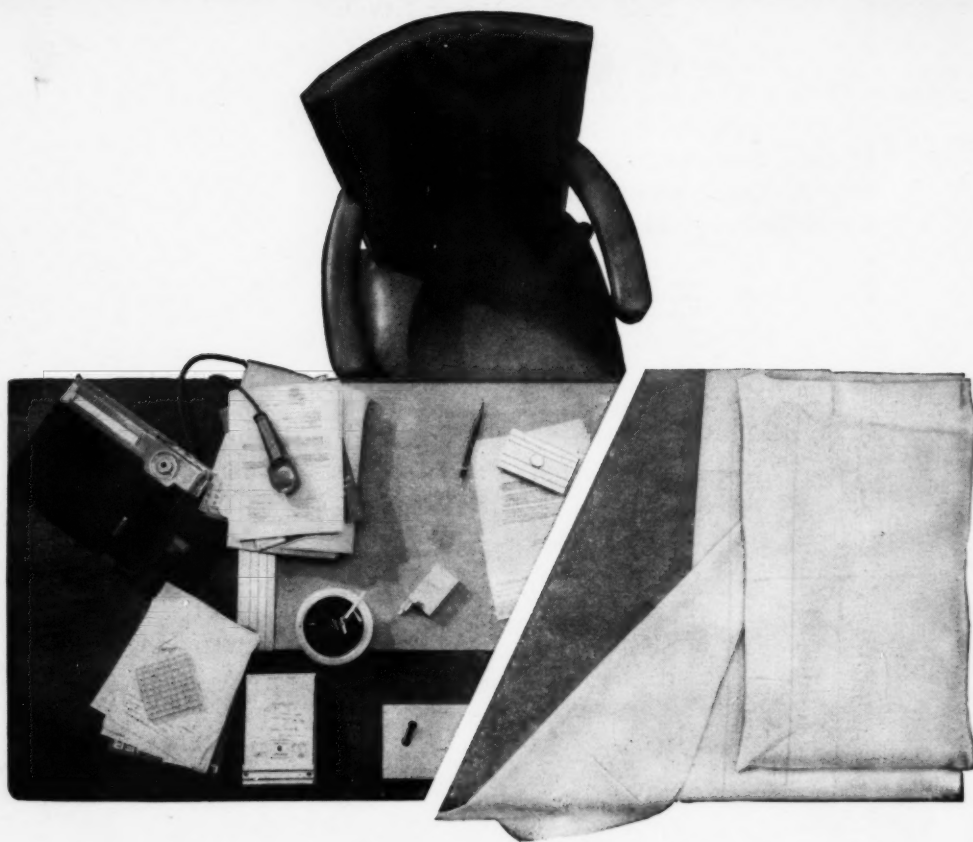
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